Board of Governors of the Federal Reserve System

Report to the Congress on the Check Clearing for the 21st Century Act of 2003

April 2007

Board of Governors of the Federal Reserve System

Report to the Congress on the Check Clearing for the 21st Century Act of 2003

Submitted to the Congress pursuant to section 16 of the Check Clearing for the 21st Century Act of 2003

April 2007

Contents

I. Executive Summary

Section 16 of the Check Clearing for the 21st Century Act of 2003 (Check 21) directs the Board of Governors of the Federal Reserve System (the Board) to study and report on the law's effects on the nation's check-collection system and to assess the need for modifications to the funds-availability requirements established in and pursuant to the Expedited Funds Availability Act (EFAA).[1,2] To address these issues, the Board conducted an extensive survey of the banking industry and supplemented the resulting data with other information from official and industry sources.

For more than a decade, substantial changes have been taking place in the U.S. retail payments system. The number of checks written likely peaked in the mid-1990s and the number of retail electronic payments exceeded the number of check payments for the first time in 2003.[3] The long-term trend toward the use of electronic payments has been prompted by ongoing changes in technology, markets, and the payments system. Although a large number of checks are still being written in the United States, the banking industry is continuing to discuss the likely prospect of a long-term decline in the use of paper checks and its implications for the check-collection system. A series of regulatory and industry changes are also reducing the number of checks being collected as businesses and governmental entities convert paper checks into electronic funds transfers that are cleared and settled through the automated clearing house (ACH) or card system networks (a process known as "check conversion").[4] Finally, Check 21 is facilitating the greater use of technology within the check-collection system, increasingly transforming how banks collect paper checks.

Check 21 became effective on October 28, 2004. For much of the next 18 months, the adoption of Check 21 unfolded slowly, with many banks still determining how best to respond to the new law. Very few checks were collected using Check 21 authority during this period. The Board's survey was conducted toward the end of that initial adoption period, in March 2006. In the twelve months following the survey, additional data indicate that the use of Check 21 authority has begun growing rapidly, albeit from a low base. In addition, through the end of 2006, few consumers have expressed concerns about Check 21 based on a review of consumer complaint files maintained by the Board and other banking regulators.

Although the survey was conducted very early in the industry's adoption of Check 21, the Board was able to use its results to assess whether there has been sufficient improvement in the nation's check-collection system to permit a modification of the funds-availability requirements in the EFAA and Regulation CC. These funds-availability requirements are generally based on a balance of the benefits to consumers and costs to the banking industry of particular availability schedules for different categories of checks and other types of payments.

---

1. Pub. L. 108-100, 117 Stat. 1177 (October 28, 2003), codified at 12 USC 5001-5018.

2. Pub. L. 100-86, 101 Stat. 635 (August 10, 1987), codified at 12 USC 4001-4010. The provisions of the EFAA related to funds availability took effect on September 1, 1988; other provisions were effective immediately upon enactment. The EFAA implementing rules are at 12 CFR part 229 (Regulation CC — Availability of Funds and Collection of Checks).

3. Gerdes, Geoffrey R., Jack K. Walton II, May X. Liu, and Darrel W. Parke, "Trends in the Use of Payment Instruments in the United States," Federal Reserve Bulletin, Spring 2005, pp. 180-201. (See http://www.federalreserve.gov/pubs/bulletin/2005/spring05_payment.pdf).

4. See the revisions to the Federal Reserve Board's staff commentary for Regulation E at http://www.federalreserve.gov/boarddocs/press/boardacts/2001/20010313/default.htm. The National Automated Clearing House Association (NACHA) establishes the industry rules associated with check conversion for ACH transactions.

In the case of checks, the ability of the banking industry to manage these costs is partly determined by the time it takes for banks to learn that checks have been returned unpaid so that they can take actions to mitigate losses.

The bank at which a check is first deposited (depositary bank) typically learns that a check has not been paid when it receives that check back from the paying bank. The total time it takes for a check to be returned to the depositary bank includes 1) the time it takes the check to reach the paying bank, 2) the time permitted under the Uniform Commercial Code (UCC) for the paying bank to determine whether to pay the check, and 3) the time it takes an unpaid check to be returned to the depositary bank.[5] Reductions in overall return times, therefore, require that a significant number of banks be able to accelerate the check collection and return process through the use of new technologies and business practices. Check 21 is expected to foster these improvements over the long term. This report provides detailed empirical estimates from the March 2006 survey of the time it takes for a depositary bank to learn that checks have been returned unpaid for each category of checks defined in the EFAA.

Based on the results of the March 2006 survey, banks are now learning more quickly about the nonpayment of checks than reported in a similar survey conducted by the Board in 1995. This improvement, however, has not been sufficient to warrant changes in the maximum permissible hold periods mandated by the EFAA and Regulation CC. In particular, the study found that unpaid checks, whether classified as local or nonlocal checks, are not returned to depositary banks soon enough to meet the long-standing Congressional benchmark for reducing associated maximum permissible hold periods.[6] In addition, while the use of Check 21 authority has been growing quickly since the March 2006 survey, much broader adoption of new technologies and processes by the industry will likely be necessary before total check return times diminish appreciably.

Losses to banks resulting from check-clearing practices influence the cost to the banking industry of funds-availability schedules. Based on the Board's survey, the estimated total value of banks' check-related losses in 2005 was $1 billion, or $711 million after estimated recoveries of losses. Commercial banks accounted for an estimated $718 million of the pre-recovery losses, which is roughly comparable to other recent industry estimates. The estimated (gross) losses represent an average annual increase of approximately 5 percent when compared with similar data reported in a 1995 survey conducted by the Board. Moreover, check losses increased even though the aggregate value of checks written has been falling somewhat and the number of checks written has been falling even more quickly.

Notwithstanding the data about return times and recent experience with check losses, the March survey results indicate that banks are generally providing faster availability of funds to consumers than required by the EFAA and Regulation CC. Local checks and nonlocal checks are generally subject to maximum permissible hold periods under the EFAA of 2 days and 5

5. The UCC is a set of model laws for commercial activity developed by the National Conference of Commissioners on Uniform State Laws and the American Law Institute. With some variation, all state legislatures have enacted the UCC. Generally, banks must return an unpaid check by midnight of the banking day following the banking day of presentment. UCC § 4-302.

6. The legislative history of the EFAA recommends a quantitative benchmark for the Board to use to determine whether to reduce these hold periods. According to that history, the return of two-thirds of the checks in a given category (before a bank must make the deposited funds available for withdrawal at the opening of business) would constitute "most" checks. Conference Report on H.R. 27 (H. Rept. 100-261), 100th Congress, 1st session, 179 (1987), pp. H6906-7.

days, respectively. The March 2006 survey data indicated that banks provided prompter availability than required by the EFAA on about 90 percent of all consumer deposits of local and nonlocal checks and half of all deposits of next-day checks.

Apart from traditional funds-availability considerations, the consolidation of the Federal Reserve Banks' check-processing sites is having a significant effect on the availability of funds to consumers. The classification of a check as local or nonlocal for EFAA purposes depends on whether the depositary bank and paying bank for a check are located in the same or different Federal Reserve check-processing regions. Because of the Federal Reserve Banks' consolidation of check-processing sites, the associated check-processing regions have been combined into single, larger regions served by the consolidated offices. The result has been to change the classification of a growing number of checks from nonlocal to local, and, in some cases, to next-day checks. Consumers who deposit checks affected by these consolidations would benefit from the lower 2-day or next-day maximum permissible hold periods if their banks do not already provide this level of availability on those deposits. Additional Reserve Bank consolidations are expected, which should decrease the effective maximum permissible hold periods on an increasing proportion of deposited checks.

Overall, the banking industry is still adjusting to the new business environment created by Check 21. Given the large number of banks in the United States, as well as long-standing business practices associated with the check clearing system, this is not surprising. However, the March 2006 data on check return times underline that more progress is needed as the traditional benchmarks for lowering maximum permissible hold times have yet to be achieved. While the use of Check 21 authority has begun to grow rapidly, the report of these changes since the Board's survey do not suggest a different conclusion regarding overall check return times. Further, banks are facing shorter hold periods for checks as a direct consequence of Reserve Bank check-processing site consolidations. As a result of these considerations, the Board does not believe that changes to the maximum permissible hold periods for banks are warranted at this time. With respect to the broader consequences of Check 21 for the payment system, the Board believes that the new law is acting as an important catalyst for potential longer-term improvements in the nation's check-collection system.

II. Introduction

The U.S. retail payments system has been changing substantially for more than a decade. Technological innovation is affecting how payments are initiated and processed. The payment needs and expectations of individuals, businesses, and governments are changing. The legal and regulatory framework in which the payments system operates is evolving. Check 21 and its implementing regulations, along with changes in other regulations and industry rules, have made it easier to collect checks electronically within the check-collection system or, alternatively, to use the information on a check to initiate check conversion transactions using the ACH or debit card networks. As a result, the use of paper checks is declining while the use of electronic payments involving debit cards, credit cards, and ACH transactions is increasing rapidly; in 2003, the number of retail electronic payments in the United States exceeded check payments for the first time.

The decline in the number of paper checks being cleared reflects not only the decreasing volume of checks being written by consumers, businesses, and governments but also the increasing volume of checks being converted to ACH transactions. For example, in 2006, there were approximately 2.4 billion check conversion transactions that might otherwise have been collected as checks.[7] In addition, the remaining paper check payments are increasingly being processed electronically.

These trends are generally causing banks to review and modernize their check-processing operations and infrastructure. Reserve Banks too are responding to these trends by restructuring their check-processing operations to keep pace with declining volumes and to meet the long-run cost-recovery requirements of the Monetary Control Act of 1980.[8] Since 2003, the Reserve Banks have reduced the number of offices at which they process checks from forty-five to twenty-two, with four more processing sites scheduled to close by early 2008. These restructuring efforts are expected to continue and even accelerate. The check-clearing process at the Reserve Banks is also becoming increasingly reliant on technologies that take advantage of the authority provided by Check 21. These Reserve Bank efforts are, in turn, facilitating the faster adoption of electronic check-processing throughout the banking industry.

Recognizing the potential benefits of Check 21 for banks and their customers, in section 16 of the Act the Congress directed the Board to study the implementation of the law and its effect on the check-collection system. In particular, the statute directed the Board to determine if Check 21 or other changes within the payments system have improved the check-collection system enough to warrant changes to the EFAA funds-availability requirements.[9] The Congress asked the Board to report the results of this study, together with any recommendations for legislative action, by April 28, 2007.

---

7. Source: NACHA. See www.nacha.org for more information.

8. The Depository Institutions Deregulation and Monetary Control Act of 1980 requires that, over the long run, fees for Federal Reserve priced services be established on the basis of all direct and indirect costs and imputed costs, including financing costs, taxes, and certain other expenses, as well as return on equity (profit) that would have been earned if a private business firm provided the services. 12 USC 248a.

9. The Congress directed the Board to study and report on (1) the percentage of total checks cleared in which the paper check is not returned to the paying bank, (2) the extent to which banks make funds available to consumers for local and nonlocal checks prior to the expiration of the maximum hold periods, (3) the length of time within which depositary banks learn of the nonpayment of local and nonlocal checks, (4) the increase or decrease in check-related losses over the study period, and (5) the appropriateness of the time periods and amount limits applicable under sections 603 and 604 of the EFAA. 12 USC 1515.

To address these issues, the Board conducted a nationally representative survey of commercial banks, savings institutions, thrifts, and credit unions, hereafter collectively referred to as "banks."[10] This survey gathered information about (1) the dollar value and total number of checks presented to a bank for payment in paper or electronic form during March 2006, (2) actual funds-availability practices for check deposits to consumer accounts that do not qualify for exception holds under Regulation CC, (3) the number of business days it takes for a check to make the round trip from the depositary bank to the paying bank and then back to the depositary bank in the event the check is returned unpaid, and (4) the dollar amount of check losses and the number of cases associated with those losses that were incurred by banks during calendar year 2005.[11] To supplement the survey data, the Board reviewed historical information on check fraud, consumer complaint data, and banking industry efforts to collect checks electronically. The Board also gathered recent industry data on Check 21 adoption since the survey period.

This report constitutes the Board's assessment of the banking industry's implementation of Check 21 to date, as well as the continued appropriateness of current EFAA and Regulation CC funds-availability requirements.

10. The banks in the study population included all 14,755 federally insured depository institutions with nonzero transaction deposits as of December 2005. The survey was sent to 2,621 institutions from this sample population, of which 966 institutions responsed.

11. *Depositary bank* (*receiving depository institution* in the EFAA) means the first bank to which a check is transferred, even if it is also the paying bank or the payee. When a check is deposited in an account, the bank that holds the account is deemed to have received the first transfer of the check, and thus is the depositary bank, even if the check is physically received and indorsed first by another bank. A *paying bank* (*originating depository institution* in the EFAA) generally is the bank by or at which a check is payable and to which it is sent for payment or collection, or the bank through which a check that is not payable by a bank is sent for payment or collection. 12 CFR 229.2(z). For purposes of subpart C, the term *paying bank* could also include a Federal Reserve Bank, Federal Home Loan Bank, or a state or unit of general local government. Id.

III. Background

Overview of Check 21

Check 21 was enacted to improve the efficiency and resiliency of the nation's check clearing system. Prior to enactment of Check 21, a bank had to present an original paper check to the paying bank for payment under the UCC unless the paying bank had agreed to accept presentment in some other form.[12] As a practical matter, to engage in broad-based electronic presentment a bank needed to have electronic-presentment agreements with all or nearly all of the banks to which it presented checks. This scheme had limited success encouraging investments in modern clearing technologies because of both the large number of paying banks and the unwillingness of some paying banks to receive electronic presentment.[13] As a result, the payment system as a whole was not able to achieve the efficiencies and potential cost savings associated with handling checks electronically.

Check 21 addressed these legal and practical problems by authorizing a new paper negotiable instrument, called a substitute check, that when properly prepared is the legal equivalent of the original check. Since the effective date of Check 21, a bank that demands a paper check for payment must accept a properly created substitute check that is presented to it.[14] Check 21, however, does not require any bank to receive checks electronically, nor does it require any bank to create substitute checks. Instead, by authorizing banks to create a substitute check that is the legal equivalent of an original check, the statute enables banks to truncate or remove the original paper checks from the check-collection system. Banks can then collect checks using electronic check images and, where necessary, create substitute checks from those images for delivery to banks that do not accept checks electronically.[15] As a result, Check 21 facilitates, but does not mandate, the expanded use of electronics in the collection and return of checks.

Check 21 also lends greater stability and resiliency to the nation's check-collection system in the event of a regional or national emergency by helping to reduce the banking industry's extensive reliance on physical transportation, particularly air transportation, to collect paper checks. This reliance became a significant issue during the events of September 11. To the extent Check 21 also fosters the use and storage of machine-readable check images, it may enhance recovery operations in the event original checks are damaged or destroyed in the collection process. For example, in the aftermath of Hurricane Katrina, some banks used Check 21 authority to transfer previously created check images of contaminated paper checks to the Reserve Banks. The Reserve Banks then printed legally equivalent substitute checks from those images to present to paying banks.

---

12. UCC § 4-110 specifically provides for electronic presentment agreements.

13. Some paying banks and bank customers prefer to receive checks in paper form for operational or other reasons.

14. A substitute check is a paper reproduction of an original check that must meet specified technical standards, and it is the legal equivalent of the original check if it has been transferred, presented, or returned by a bank and (1) accurately represents all the information from the original check and (2) bears a legend stating that it is a legal copy of the original check. The Check 21 implementing rules are at 12 CFR part 229, subpart D. The term *substitute check* is defined in 12 USC 5002(16) as implemented by 12 CFR 229.2(aaa).

15. For example, under Check 21, a depositary bank in California that receives a check drawn on a bank in Pennsylvania can transfer check information electronically to a bank near the paying bank (such as a Reserve Bank) with which it has an agreement to do so. That bank then can, if necessary, create a substitute check that is the legal equivalent of the original check to present to the Pennsylvania paying bank.

Overview of the EFAA

The EFAA, enacted in 1987, establishes the maximum periods of time that banks can hold funds deposited into transaction accounts before those funds must be made available for withdrawal (maximum permissible hold periods). The EFAA also requires banks to disclose their policies regarding funds availability and authorizes the Board to consider regulatory or other measures that would improve the efficiency of the check-collection system. The EFAA's provisions were implemented in 1988 by the Board's Regulation CC.

Before the EFAA, banks established funds-availability schedules mainly to protect against the risk that they could not recover funds from their depositors if paying banks returned checks unpaid. At that time, the check-return system was a slow, labor-intensive process and, under the existing state laws, checks were returned by charging them back through the same chain of banks that handled the checks for forward collection. Therefore, the depositary bank faced some risk of loss if a depositor withdrew funds from a deposit of checks before the bank learned that one or more of the checks was being returned unpaid. Some banks attempted to minimize this risk by holding funds for substantial periods before making them available to the depositing customer. Depositors requested that the Congress address this issue and establish funds-availability rules that would provide prompter access to deposited funds. Within the EFAA, the Congress attempted to balance depositors' desire for prompt funds availability with banks' concerns about managing the risk of checks being returned unpaid.

To provide more prompt funds availability to depositors, the EFAA established funds-availability schedules. Under these schedules, funds from deposits to transaction accounts must be made available to customers for withdrawal at the opening of business within one (next-day availability), two (two-day availability), or five (five-day availability) business days following the banking day of deposit, depending upon the characteristics of the deposit. Deposits made by electronic payments receive next-day availability. Cash deposits receive next-day availability if the deposit is made in person to an employee at the depositary bank; otherwise, they receive two-day availability. Certain check deposits (such as U.S. Treasury, state and local government, local on-us, cashier's, teller's, and certified checks) as well as the first $100 of most other check deposits also receive next-day availability.[16,17] Except as noted above, deposits of checks drawn on local banks (paying banks that are located in the same Federal Reserve check-processing region as the depositary bank) receive two-day funds availability. Funds from deposits of checks drawn on nonlocal banks (paying banks that are located in a different check-processing region than the depositary bank) and any deposit (cash or check) made at a nonproprietary automated teller machine (ATM) receive five-day availability.

Banks are free to provide more rapid funds availability to their customers than required

16. A U.S. Treasury check receives next-day availability if it is deposited in the account of the person to whom it was issued. 12 USC 4002(a)(2)(A). A state or local government check receives next-day availability if it is deposited in the account of the person to whom it was issued, is deposited in-person at a bank within the state of the government entity issuing the check, and the depositor uses a special deposit slip if such a slip is required. A cashier's, teller's, or certified check receives next-day availability if it is deposited in the account of the person to whom it was issued and deposited in person at a bank using a special deposit slip if such a slip is required.

17. An *on-us* check is a check that is deposited in and drawn on the same or another branch of the same bank. For purposes of Regulation CC, funds deposited by an on-us check are entitled to next-day availability if both branches of the relevant bank are located in the same state or Federal Reserve check-processing region. 12 CFR 229.10(c)(1)(vi). All other on-us checks are considered nonlocal for funds-availability purposes.

by the EFAA and Regulation CC.[18] Banks that generally make funds available for withdrawal sooner than required by Regulation CC may, on a case-by-case basis, increase the amount of time before deposited funds are made available for withdrawal up to the time periods outlined above for next-day, local, and nonlocal checks.[19] Finally, for certain types of deposits that are deemed to be especially risky, a depositary bank may extend the maximum permissible holds for an additional reasonable time period (safeguard exceptions).[20]

The EFAA further requires the Board to reduce, by regulation, the maximum permissible hold periods for local and nonlocal checks and deposits at nonproprietary ATMs "to as short a time as possible and equal to the period of time achievable under the improved check-clearing system for a depositary bank to reasonably expect to learn of the nonpayment of most items for each category of checks."[21] This requirement creates an explicit link between a depositary bank's ability to learn of the nonpayment of a check and the reduction in the time period by which that bank must make the funds available. The statute's legislative history recommends a quantitative benchmark for the Board to use to determine whether to reduce these hold periods. According to that history, the return of two-thirds of the checks in a given category (before a bank must make the deposited funds available for withdrawal at the opening of business) would constitute "most" checks.[22] The Board relies upon this Congressional benchmark for assessing the continued appropriateness of current Regulation CC funds-availability requirements.

To reduce banks' risk of loss from returned checks, the Congress authorized the Board to take appropriate measures to improve the efficiency of the check-collection system and enable banks to learn of unpaid checks more quickly. The Board did so in 1988 through Regulation CC, which requires that banks return checks "expeditiously."[23] The expeditious-return provisions were designed to increase the likelihood that the depositary bank would learn of a returned check before having to make the related funds available under the new, expedited schedule. These steps, initially adopted in 1988, remain in effect today.

The Board made further improvements to the check-collection system in 1992 when it adopted rules for the same-day settlement of checks presented by private-sector banks. These

18. 12 USC 4006(c).

19. Under 12 CFR 229.16 through 229.18, a bank must provide a customer with a disclosure describing its overall availability policy before opening a new account and upon request and also must notify its consumer account holders of changes in the bank's availability policies. In addition, a bank must provide a customer with a notice when it invokes a safeguard exception hold or a case-by-case hold to delay the availability of a customer's deposited funds. 12 CFR 229.13(g) and 12 CFR 229.16(c), respectively.

20. As implemented by 12 CFR 229.13, 12 USC 4003 allows safeguard exceptions under certain conditions, such as for amounts exceeding $5,000 that are deposited by one or more checks by the same customer on the same banking day, redeposited checks, deposits to accounts that have had repeated overdrafts, deposits containing a check that the bank has a reasonable cause to believe is not collectible, and deposits during emergency conditions. In addition, deposits into new accounts are not subject to the standard funds-availability schedules.

21. 12 USC 4002(d)(1).

22. Conference Report on H.R. 27 (H. Rept. 100-261), 100th Congress, 1st session, 179 (1987), pp. H6906–7.

23. Under Regulation CC, checks can be considered returned expeditiously in one of two ways: (1) by sending the returned check in such a manner that it normally would reach the depositary bank by the second business day (for a local returned check) or the fourth business day (for a nonlocal returned check) following presentment; or (2) by sending the returned check in as expeditious manner as it or a similarly situated bank would use for the forward collection of a check of similar amount drawn on the depositary bank. Regulation CC also provides that unpaid checks may be returned directly to the depositary bank (or to any other bank that agrees to handle the check expeditiously) instead of by reversing the forward-collection path and sending the returned check through all the banks that handled the check during the forward-collection process. Using this option reduces the number of banks that might handle a returned check. 12 CFR 229.30(a) and 229.31(a), Finally, Regulation CC adopted rules for handling checks during forward collection and return that were designed to expedite the returned-check process, such as requiring banks to indorse checks according to specified standards to preserve previous bank indorsements (particularly that of the depositary bank) and permitting banks to prepare a returned check for automated processing. 12 CFR 229.35(a).

rules improved the check-collection process by enhancing the presentment abilities of private-sector banks and reducing the attractiveness of collecting checks through intermediary banks, including the Reserve Banks.[24] As a result, checks could be collected more quickly between banks.

24. Under the same-day settlement provisions, which took effect in 1994, a presenting bank receives settlement the same business day if it presents the checks directly to the paying bank at a designated location by 8:00 a.m. (local time of the paying bank). 12 CFR 229.36(f).

IV. Check 21 Adoption

Check 21 is facilitating rapid growth in the use of electronics within the nation's check-collection system, which is improving the efficiency of the nation's payments system.

For the most part, banks (other than the Reserve Banks) did not immediately take advantage of the authority provided in Check 21. During the first eighteen months after Check 21 became effective, banks did, however, begin to use Check 21 authority to collect large-value checks between depositary banks and paying banks that were geographically distant from one another. The Reserve Banks, for example, initially used Check 21 authority to collect checks deposited with them on the West Coast that required presentment to paying banks located on the East Coast.

As shown in table 1, the Board's March 2006 survey indicates that at least 93 percent of all checks paid in the United States still involved the presentment of a paper check.[25] Banks presented the remaining checks, with the agreement of the paying bank, using either electronic check images (2 percent) or electronic check data derived from the magnetic ink character recognition (MICR) line (5 percent).[26]

Table 1
Distribution of Checks, by Presentment Method and Asset Size

Percent

Presentment Method	All banks	
	Value	Number
Paper presentment	*93*	*93*
Original checks	85	90
Substitute checks	8	3
Electronic presentment	*7*	*7*
Image presentment	2	2
MICR presentment	5	5
Total	100	100

Source: 2006 Check 21 survey.
Note: Covers period March 1–31, 2006. Figures may not sum to totals because of rounding. Figures include on-us checks.

The initial slow pace of Check 21 adoption by banks resulted from the significant technological investments that had to be made to create and process check images and substitute checks. Banks wanting to make use of Check 21 authority needed to invest in image cameras

25. The March 2006 Check 21 survey requested that banks report the total number of checks paid by the bank and whether the presentment was made using a paper check or electronic data. Depositary banks and intermediary banks, such as the Reserve Banks, use substitute checks, electronic check images, and electronic check data to collect a greater proportion of checks where the depositary bank and paying bank are different (interbank check collections) than of all checks paid (including on-us checks) within the United States. The Board estimates that the Reserve Banks account for about half of all interbank check collections. For presentments made using a paper check, banks reported whether presentment occurred with the receipt of the original paper check or a substitute check.

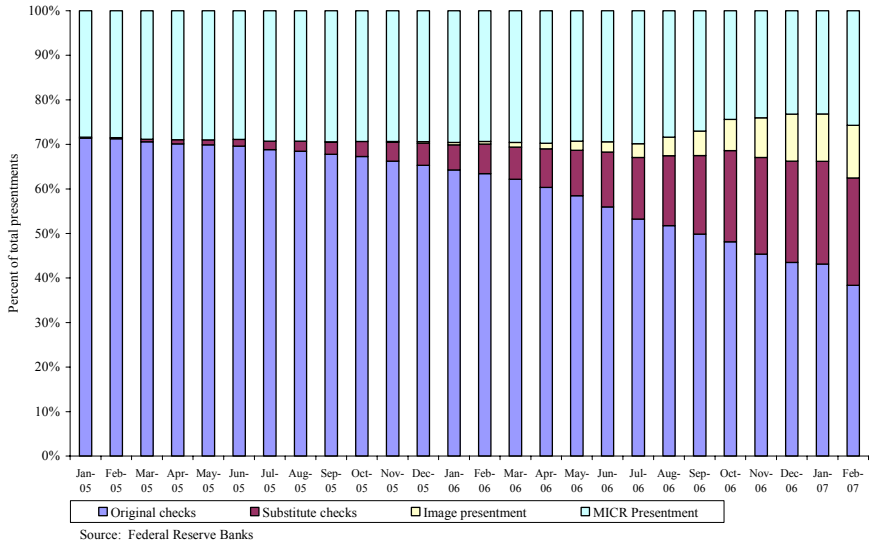
26. For presentments made electronically, banks reported whether they paid the check based on the receipt of electronic check images or traditional electronic check data, such as MICR presentment. When Board staff pre-tested the survey, banking representatives indicated that banks that received electronic presentments would not be able to report whether, for recordkeeping or similar purposes, they also received a paper check. As a result, the frequency with which paying banks ultimately received a paper check may be understated.

and communications network capacity. A few banks, particularly the Reserve Banks, chose to undertake significant investments in substitute-check printers. Many banks also needed to reengineer their check systems and integrate those new systems with other back-office systems to support the processing of check images. Further, banks had to establish legal and operational agreements to send and receive electronic check images. Finally, and most importantly, banks needed to determine whether there was a sufficient business case to justify the investment. As a result, some banks simply chose to delay Check 21 investments until the business case was stronger and the underlying technologies, processing standards, and vendor software and hardware alternatives were more clearly defined.

Since March 2006, however, the banking industry's use of electronics to collect and present checks for payment has begun to increase rapidly. In January 2007, the major check clearinghouses and service providers presented approximately 324 million electronic check images and 234 million substitute checks to paying banks for payment.[27] These figures represent an almost five-fold increase in the number of electronic check images and three-fold increase in the number of substitute checks presented to all paying banks in the United States during March 2006.[28]

As shown in figure 1, data from the Reserve Banks highlight a substantial increase in the extent to which they present electronic check images and print substitute checks to present to paying banks.[29]

Figure 1
Reserve Bank Check Presentments by Type
January 2005-February 2007



Source: Federal Reserve Banks

27. Sources: Federal Reserve Banks, the National Clearing House Association (NCHA), Viewpointe, Endpoint Exchange, Frost Bank, and the Small Value Payments Company (SVPCo). These figures represent only checks presented directly to paying banks for payment. Checks that were processed, exchanged, or settled between these institutions before being presented to the paying banks are excluded from these figures. In March 2006, these institutions (excluding Frost Bank) constituted about 90 percent of the substitute checks and about 60 percent of the electronic check images reported in the 2006 Check 21 survey.

28. Growth in the use of Check 21 authority may be understated in these figures because they reflect only check images and substitute checks presented for payment to the paying bank through the major check clearinghouses and service providers (including Frost Bank).

29. Under the Reserve Banks' MICR presentment services, the paying bank's receipt of the electronic data constitutes presentment; the paying bank also may receive the original check or a substitute check for recordkeeping or other purposes.

Their experiences with the use of Check 21 authority, along with those of the banking industry more generally, are instructive for understanding the law's current and likely future influence on the check-collection system. Given the current level of adoption and its expected growth, the Board believes that Check 21 is improving the nation's check system. The Board expects that, over the next year or two, many more banks will make the needed investments in the technology and systems required to send and receive electronic check images. The Board also believes that the use of the substitute checks authorized by Check 21 is proving to be an important transitional tool to facilitate the banking industry's greater use of technology to collect and return checks. The use of substitute checks should begin to decline as more paying banks accept checks presented electronically. With respect to the broader consequences of Check 21 for the payment system, the Board believes that the new law is acting as an important catalyst for potential longer-term improvements in the nation's check-collection system.

V. Funds-availability Practices

Banks generally provide prompter funds availability than required by the EFAA on deposits to consumer transaction accounts.

According to the results of the Board's March 2006 survey, banks provide prompter availability than required by the EFAA for about 90 percent of all consumer deposits of local and nonlocal checks and about half of all next-day checks (table 2). Moreover, banks make funds available from the majority of consumer check deposits within one business day.[30] However, actual funds-availability practices vary among different types of banks. Because of its limited adoption as of March 2006, Check 21 had, at best, a small influence on banks' actual funds-availability practices.

Table 2
Consumer Customer Funds Availability, by Type of Check and Bank

Percent

Type of check availability	Type of bank			All banks
	Commercial banks	Credit unions	Savings institutions	
Next-day checks				
Same day	45	81	54	49
Next day	100	100	100	100
Local checks				
Same day	24	71	29	29
Next day	92	84	72	89
Two days	100	100	100	100
Nonlocal checks				
Same day	13	61	26	18
Next day	69	65	42	66
Two days	88	72	65	85
Three days	94	77	73	91
Four days	95	79	78	92
Five days	100	100	100	100

Source: 2006 Check 21 survey.
Note: Covers period March 1–31, 2006. Figures may not sum to totals because of rounding. Except for funds made available the banking day of deposit, these figures reflect funds availability provided at the opening of business of that business day.

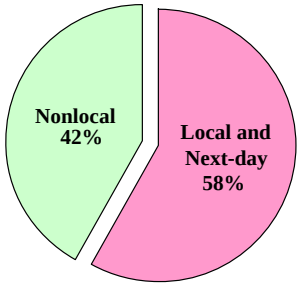
30. The survey requested that banks exclude from their responses on actual funds-availability practices those check deposits that qualified for safeguard exceptions under Regulation CC.

The maximum permissible hold on an increasing proportion of deposited checks has decreased from five days to one or two days because of the consolidation of Federal Reserve check-processing regions.

The consolidation of Federal Reserve check-processing regions directly affects when funds must be made available because the EFAA, as implemented by Reg CC, categorizes checks as local or nonlocal based upon whether the depositary bank and paying bank are located in the same or different Federal Reserve check-processing regions.[31] The consolidation of Reserve Bank check-processing offices and their associated check-processing regions, therefore, increases the percentage of checks that would be classified as either local or next-day for funds-availability purposes.[32] As a result, banks must make more of the funds associated with their customers' check deposits available at the opening of business only one or two business days following the banking day of deposit.

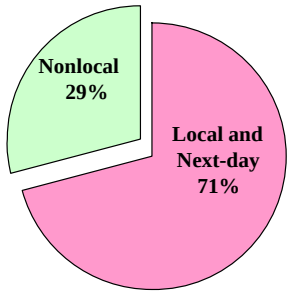
Reserve Bank data suggest the magnitude of these changes for the industry. For example, the proportion of checks that the Reserve Banks process that would be classified as local or next-day for funds-availability purposes increased from 58 percent in 1995 to 71 percent by late 2006. After four additional check-processing offices are consolidated by early 2008, the Board estimates that about 73 percent of all checks the Reserve Banks process could be classified as local or next-day for funds-availability purposes. This percentage will continue to increase as the Reserve Banks further consolidate their check-processing offices.

Figure 2
Percentage of Checks Processed by Reserve Banks by Funds-availability Category
1995



Source: Federal Reserve Banks.

Figure 3
Percentage of Checks Processed by Reserve Banks by Funds-availability Category
2006



Source: Federal Reserve Banks.

31. 12 USC 4001(9); 12 CFR 229.2(m), (r), (s), (v), and (w).

32. The calculation of local and nonlocal checks processed by the Reserve Banks (including U.S. Treasury checks and U.S. Post Office money orders) is based upon whether the depositary bank and paying bank are in the same (local) or different (nonlocal) Federal Reserve check-processing regions. Based upon the results of the March 2006 survey and the research completed by Gerdes et. al. (2005), the Board estimates that a significant portion of the checks identified as local, particularly local on-us checks, would be eligible to receive next-day funds availability under the EFAA. In addition, a portion of the checks identified as nonlocal, such as cashier's or certified checks, would be eligible to receive next-day funds availability under the EFAA. Therefore, these estimates understate the total percentage of checks the Reserve Banks process that would be eligible for next-day and local funds availability.

VI. Returned Checks

Although depositary banks learn of the nonpayment of checks faster than they did when the EFAA was enacted, banks still do not receive "most" local or nonlocal checks before they must make funds available for withdrawal.

Over the past two decades, the estimated average return time has declined about 25 percent, enabling banks to learn more quickly of the nonpayment of local and nonlocal checks.[33] The primary source of the improvements was the Board's expeditious-return rules established in 1988 in Regulation CC. As a result of those regulatory changes, the time it took for all categories of returned checks to be sent from the depositary bank to the paying bank and back to the depositary bank decreased, on average, from 4.9 business days in 1985 to 3.9 business days in 1995.[34] The Board's Check 21 survey indicates that the average check return time has declined further to 3.7 business days in 2006.[35] The overall reduction in return times, however, has not been sufficient to enable banks to receive "most" (i.e., two-thirds) of the returned checks from any category of check before they are required by law to make funds available to their customers, as detailed in table 3.[36]

Table 3
Return Times for All Banks, by Type of Check

Cumulative percent

	Type of check		
Number of business days	Next-day	Local	Nonlocal
1	16	6	2
2	40	22	9
3	65	66	30
4	79	82	57
5	91	91	78
6	94	96	88
7	97	98	94
8 or more	100	100	100

Source: 2006 Check 21 survey.
Note: Figures include all checks returned to the depositary bank by the close of business of each business day.

Next-day checks. Depositary banks reported that it takes three business days following

33. Banks likely will learn more quickly about unpaid large-dollar checks (a check written for $2,500 or more) than the following returned-check times might indicate because Regulation CC requires that a paying bank must provide special notice to the depositary bank when it is returning a large-dollar check. 12 CFR 229.33.

34. The Board conducted a study on check fraud and funds availability for the Congress in 1996. See Board of Governors of the Federal Reserve System, "Report to the Congress on Funds Availability Schedules and Check Fraud at Depository Institutions," Washington, DC: October 1996. As a part of that study, the Board completed two separate surveys, the 1996 check fraud survey and the 1996 Reserve Bank survey. The 1996 check fraud survey was a nationally representative sample of banks. The 1996 Reserve Bank survey randomly sampled checks processed by the Reserve Banks. Because the Board's 1996 survey provided calendar-day figures for 1985 (6.8 calendar days) and 1995 (5.5 calendar days), the number of business days, on average, required to return unpaid checks to depositary banks has been estimated based upon the probability of non-business days intervening within a given calendar-day period.

35. The 2006 Check 21 survey updates the 1996 check fraud survey. The 2006 calculations also assume that a check returned the day of or one business day after the day of deposit was returned the business day after deposit; also, a check returned eight or more business days after the day of deposit was considered returned eight business days after deposit.

36. Under 12 USC 4006(b), banks are required to make funds available for withdrawal at the opening of the business day on which funds must be made available. For example, funds must be made available to the depositing customer at the opening of business on the business day following the banking day of deposit for next-day checks.

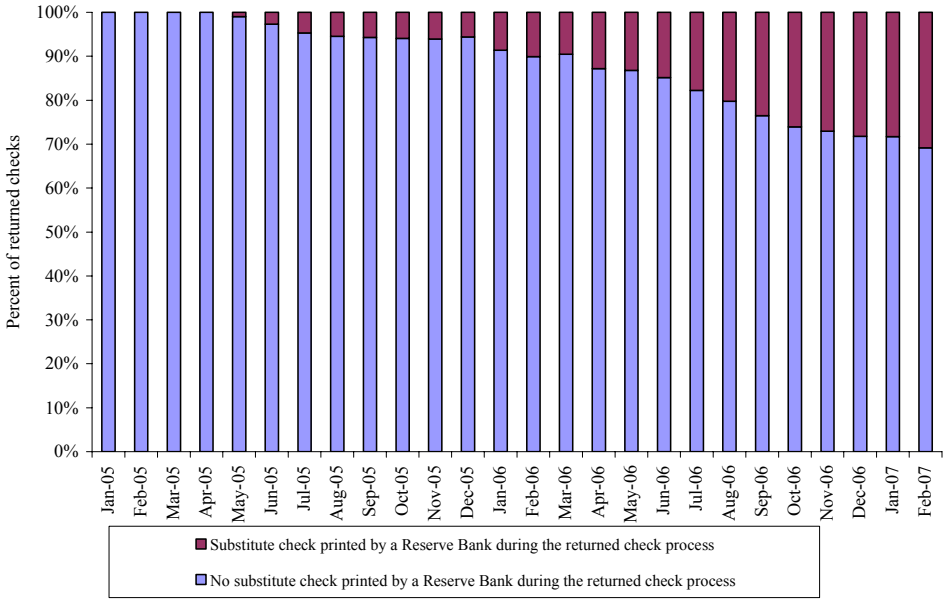
the banking day of deposit to receive two-thirds of all returned next-day checks. Depositary banks rarely, if ever, receive returned next-day checks before they must make funds available to their customers at the opening of business the day after the banking day of deposit.

Local checks. Depositary banks reported that they received only 6 percent of returned local checks before funds must be made available at the opening of business on the second business day following the banking day of deposit. About two-thirds (66 percent) of all unpaid local checks are returned by the end of the third business day following the banking day of deposit.

Nonlocal checks. Depositary banks reported that they received 57 percent of returned nonlocal checks before funds must be made available at the opening of business on the fifth business day following the banking day of deposit. Only 30 percent of returned nonlocal checks are received by the opening of business on the fourth business day following the banking day of deposit.

Because of its limited adoption at the time of the Board's March 2006 survey, Check 21 contributed minimally to the improvement in return times. More recent industry figures, however, do indicate an increasing use of Check 21 authority to create substitute returned checks. For example, as shown in figure 4, the Reserve Banks printed substitute checks for about 30 percent of all the checks they returned to depositary banks in February 2007. The Reserve Banks provided only a negligible number of returned checks to depositary banks in the form of electronic check images.[37]

Figure 4
Checks Returned by the Reserve Banks to Depositary Banks
January 2005-February 2007



Source: Federal Reserve Banks

37. The Reserve Banks report the number of substitute checks they printed to return to depositary banks. Paying banks also returned an unknown number of unpaid substitute checks through the Reserve Banks for delivery to depositary banks. As a result, the total number of substitute checks returned to depositary banks through the Reserve Banks is understated.

While the use of Check 21 authority has been growing quickly since the Board's March 2006 survey, much broader adoption of new technologies and processes by the banking industry must occur before check return times can decline appreciably. Because this more fundamental transformation of the banking industry has only just begun, however, the increasing but still relatively limited use of Check 21 authority to return checks to depositary banks does not suggest any further appreciable reduction in check return times since the Board's survey.

VII. Check Losses

In 2005, banks reported gross check losses of $1.0 billion, or $711 million in net losses after associated recoveries.

The financial losses associated with processing checks that all banks incurred before any associated recoveries were $1.0 billion in 2005.[38] As shown in table 4, the estimated number of cases associated with these losses was 1.1 million. The average loss (before recoveries) across all banks was $898 per case.

Table 4
2005 Check Losses and Recoveries, by Size and Type of Bank

	Losses			Recoveries		Net Check Losses after Recoveries	
Size and type of bank	Millions of dollars	Thousands of cases	Percent change from 2004	Millions of dollars	Thousands of cases	Millions of dollars	Thousands of cases
Size of bank							
Small	187	332	21	64	162	123	170
Medium	144	206	18	48	76	97	129
Large	686	595	11	195	528	491	67
Type of bank							
Commercial banks	718	791	13	246	650	473	141
Credit unions	104	194	14	26	70	77	124
Savings institutions	196	148	15	34	46	161	102
Total	1,018	1,133	13	307	766	711	367

Source: 2006 Check 21 survey.
Note: Figures may not sum to totals because of rounding. Recoveries may relate to losses in 2005 and prior years.

Of the total check loss amount before recoveries (gross check losses), the commercial bank share was estimated to be $718 million, or 71 percent. This amount of commercial bank gross check losses is consistent with other recent industry data from the American Bankers Association (ABA). The ABA conducts biennial surveys that track check fraud and other deposit account losses at commercial banks. According to the ABA, commercial bank check-fraud losses (before recoveries) were approximately $679 million in 1999, $698 million in 2001, and $677 million in 2003, figures roughly comparable to the $718 million reported in the Board's 2006 survey.[39] The estimated gross check losses represent an average annual increase of approximately 5 percent when compared with similar data reported in the Board's 1996 study.

The estimated total value of check losses initially written off but later recovered (recoveries) in 2005 amounted to $307 million, which is equivalent to about 30 percent of gross

38. *Check losses* means financial losses incurred and written off by a bank that are related to processing check payments. Losses only include the value of the check. Unless otherwise stated, all loss figures are reported before any subsequent recoveries. The Board did not attempt to identify or quantify losses incurred by the check depositor. These percentages are not directly comparable to the 1996 Federal Reserve study because the 1996 study included only bank losses from check fraud. The 2006 study includes all bank check losses.

39. Based upon the Board's Check 21 survey, commercial bank check losses in 2005 were 6 percent greater than the ABA's 2003 estimate. In 2004, commercial bank check losses (as estimated based upon the Board's survey) were approximately $635 million or 6 percent less than the ABA's 2003 estimate. The ABA did not complete a survey for 2005 because the Board was conducting its survey. (See http://www.aba.com/Surveys+and+Statistics/SS_Depositfraud.htm.)

check losses in 2005.[40] The average recovery was $400 per case, or 45 percent of the average value of 2005 gross check losses. The total net value of check losses in 2005, calculated as 2005 gross check losses minus 2005 total recoveries, was $711 million.

Overall, the total value of check losses before any recoveries is estimated to have increased approximately $121 million, or 13 percent from 2004 to 2005. The increase in the total value of check losses was evident in all size and type categories. Overall, 53 percent of banks indicated that their check losses were greater in 2005 compared with 2004 (table 5). Of the remaining banks, 27 percent reported that the value of their check losses in 2005 were smaller, and 20 percent reported no change. It is not possible to determine with the available data whether the estimated increase between 2004 and 2005 is because of a one-time increase in check losses or indicative of a longer-term trend.

Table 5
Distribution of Banks' 2005 Check Losses Compared with 2004, by Size and Type of Bank

Percent

Size and type of bank	Greater	Smaller	Same
Size of bank			
Small	27	12	16
Medium	20	10	3
Large	6	4	1
Type of bank			
Commercial banks	34	19	15
Credit unions	12	4	2
Savings institutions	7	4	2
Total	53	27	20

Source: 2006 Check 21 survey.
Note: Figures may not sum to totals because of rounding.

Losses associated with depositary bank activities are typically incurred when funds are made available, are withdrawn by the depositor before the bank learns of the check being returned unpaid, and are not recovered by the bank from the depositor. Depositary banks' losses are more likely to be associated with the timing of when funds from check deposits must be made available to depositors than are losses associated with paying-bank activities. Paying-bank losses are typically incurred when a bank learns of a bad check after having paid it but either the bank's return deadline has passed and the paying bank has no warranty claim against the presenting bank or the paying bank's warranty claim against the presenting bank is not large enough to merit pursuing the claim.

Table 6 compares check losses from depositary-bank and paying-bank activities. The losses associated with depositary-bank activities ($555 million) were 54 percent of total losses, slightly greater than those associated with paying-bank activities ($463 million) in 2005.

40. *Recoveries* means check losses that were written off by the bank but subsequently recovered. Recoveries in 2005 are associated with losses incurred during 2005 or prior years.

Table 6
Distribution of 2005 Value of Check Losses between Paying Bank and Depositary Bank, by Size and Type of Bank

Size and type of bank	Paying bank		Depositary bank		All banks	
	Millions of dollars	Percent of losses	Millions of dollars	Percent of losses	Millions of dollars	Percent of losses
Size of bank						
Small	89	47	98	53	187	100
Medium	65	45	79	55	144	100
Large	310	45	377	55	686	100
Type of bank						
Commercial banks	356	50	363	51	718	100
Credit unions	41	39	63	61	104	100
Savings institutions	67	34	128	66	196	100
Total	463	46	555	54	1,018	100

Source: 2006 Check 21 Survey
Note: Figures may not sum to totals because of rounding.

The average loss per case associated with depositary bank activities was $1,181, or 69 percent greater than the average loss of $699 associated with paying-bank activities.

Table 7
Distribution of 2005 Number of Check Loss Cases between Paying Bank and Depositary Bank, by Size and Type of Bank

Size and type of bank	Paying banks		Depositary banks		All banks	
	Thousands of cases	Percent of cases	Thousands of cases	Percent of cases	Millions of dollars	Percent of losses
Size of bank						
Small	212	64	120	36	332	100
Medium	121	59	85	41	206	100
Large	330	56	265	45	595	100
Type of bank						
Commercial banks	477	60	314	40	791	100
Credit unions	116	60	78	40	194	100
Savings institutions	71	48	77	52	148	100
Total	663	59	470	41	1,133	100

Source: 2006 Check 21 survey.
Note: Figures may not sum to totals because of rounding.

Table 8 compares the value of check losses among different depositary banks. Table 9 compares the number of check-loss cases. Similar comparisons of check losses among different paying banks are not available because, unlike depositary banks, few paying banks know the funds-availability category applied to the checks they pay. Among the different categories of check deposits, nonlocal checks accounted for the largest portion of the value (45 percent), but local checks accounted for the largest portion of the cases (55 percent) associated with all banks' total check losses. Nonlocal checks incurred the highest average loss per case ($1,975), more than double that of local checks. Next-day checks accounted for 12 percent of the value and 19 percent of the cases associated with depositary banks' check losses.

Table 8
Check Losses at Depositary Banks, by Size and Type of Bank

Size and type of bank	Next-day checks		Local checks		Nonlocal checks	
	Millions of dollars	Percent of depositary losses	Millions of dollars	Percent of depositary losses	Millions of dollars	Percent of depositary losses
Size of bank						
Small	13	2	43	8	43	8
Medium	12	2	31	6	36	6
Large	41	7	166	30	170	31
Type of bank						
Commercial banks	45	8	151	27	167	30
Credit unions	13	2	32	6	19	3
Savings institutions	9	2	57	10	63	11
Total	66	12	240	43	249	45

Source: 2006 Check 21 survey.
Note: Figures may not sum to totals because of rounding.

Table 9
Check Loss Cases at Depositary Banks, by Size and Type of Bank

Size and type of bank	Next-day checks		Local checks		Nonlocal checks	
	Thousands of cases	Percent of depositary cases	Thousands of cases	Percent of depositary cases	Thousands of cases	Percent of depositary cases
Size of bank						
Small	23	5	69	15	28	6
Medium	16	3	45	10	23	5
Large	52	11	138	29	75	16
Type of bank						
Commercial banks	61	13	169	36	84	18
Credit unions	21	5	40	9	17	4
Savings institutions	9	2	43	9	25	5
Total	91	19	253	54	126	27

Source: 2006 Check 21 survey.
Note: Figures may not sum to totals because of rounding.

Overall, the Board's survey indicates that a significant majority of check losses were concentrated within a subset of banks, primarily large commercial banks. Small and medium-sized banks, however, experienced the greatest overall percentage increase in their check losses between 2004 and 2005. While the reason for the increase in check losses could not be determined from the Board's survey, it is unlikely to be attributable to banks' extremely limited use of Check 21 authority in 2005.

VIII. Consumer Concerns Related to Check 21

The Board has received few complaints concerning Check 21 and banks' funds-availability practices since the passage of Check 21.

Between January 1, 2003 and December 31, 2006, the Board's Division of Consumer and Community Affairs logged 83 complaints about state member banks involving issues covered by the EFAA and Check 21, or significantly less than 1 percent of all 9,117 complaints received. Of those 83 logged complaints, 51 related to banks' funds-availability or check-hold practices. Another 31 complaints were purported to be related to Check 21. Upon investigation, however, it was found that nearly all of those 31 complaints related to the conversion of consumer checks to an electronic payment using the ACH or debit card networks; none actually involved the use of Check 21 authority (such as substitute checks). The experience of other bank regulators has been similar. During the same period, less than 1 percent of all consumer complaints received by the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, the Office of Thrift Supervision, and the National Credit Union Administration with regard to institutions they supervise were associated with Check 21.

The Board's Legal Division and Division of Reserve Bank Operations and Payment Systems also received and responded to several dozen consumer and banking industry complaints or questions purportedly related to Check 21. However, nearly all of the consumer complaints were actually related to check conversion, again highlighting continued consumer confusion between check conversion and Check 21. To help address this confusion, the Board has actively engaged with the industry and consumer groups in educational efforts, including the publication of several brochures explaining the differences between Check 21 and check conversion.[41] Most of the remaining questions were largely requests for clarification regarding the technical standards for, or regulatory requirements associated with, Check 21. A few related to the type of documentation account holders should receive from their banks, which is not an issue that Check 21 addresses. The Board also received and reviewed information from consumer groups noting their memberships' anecdotal concerns about banks' funds-availability policies.

41. See www.federalreserve.gov/paymentsystems/truncation/default.htm.

IX. Assessment of EFAA Sections 603 and 604, and Recommendations

To date, there has not been sufficient improvement within the check-collection and check-return system to warrant legislative or regulatory changes to any of the funds-availability requirements in the EFAA and Regulation CC.

Section 16 of the Check 21 Act specifically directs the Board to study the appropriateness of the periods and amount limits applicable under sections 603 and 604 of the EFAA and to report to the Congress the results of the study, together with recommendations for legislative action.

In the course of its review, the Board considered possible adjustments to the time periods and amount limits in EFAA sections 603 and 604 that would be within the scope of its rulemaking authority and those that would require legislative action. The Board has rulemaking authority to reduce the maximum permissible hold periods for deposits of local and nonlocal checks as well as deposits made at nonproprietary ATMs and is required to use that authority when circumstances warrant. The Board also has rulemaking authority to establish reasonable periods for the safeguard exceptions.[42]

In reviewing possible adjustments to the EFAA or Regulation CC, the Board carefully weighed whether there was sufficient improvement within the check-collection system to warrant any such changes. In making this assessment, the Board relied upon the Congress's recommended benchmark for the return of most checks to assess the appropriateness of any reductions to the maximum permissible hold periods. The Board also evaluated the likely effects of the potential adjustments on banks' ability to manage their risk of loss from unpaid returned checks and the customers' ability to receive prompt funds availability on deposits to their transaction accounts in light of the increased check-related losses in 2005.

Finally, the Board considered the effects of two separate but interrelated and reinforcing trends within the check-collection system—the consolidation of Federal Reserve check-processing regions and the increasing use of Check 21 authority to facilitate the collection and return of checks electronically—on the need for adjustments to the EFAA or Regulation CC. In particular, the Board considered how the consolidation of Federal Reserve check-processing regions is reducing the maximum permissible hold period from five days to two days (or one day) on an increasing proportion of deposited checks without the need for any adjustments to the EFAA and Regulation CC.

Overall, the Board found that the increased use of electronics to collect and return checks may enable a bank to learn of an unpaid returned check more quickly. To benefit fully from these potential improvements, however, the banking industry will need to continue to reengineer and streamline all the systems and business processes it uses to collect and return checks. Without these broader changes to the check collection and return cycle (including how quickly the paying bank determines whether to return a check unpaid), depositary banks may still not learn of the nonpayment of most checks quickly enough to reduce the maximum permissible

42. 12 USC 4002(d)(1) and 12 USC 4003(a)–(e).

hold periods.[43]

Based upon these considerations, the Board recommends making no changes to any current funds-availability periods, amount limits, or safeguard exceptions.

Local and nonlocal checks

The Board evaluated whether there has been sufficient improvement in check collection and return times to warrant reducing the maximum permissible check hold periods. Under the EFAA, for the Board to reduce the hold periods for local and nonlocal checks, depositary banks must learn of the nonpayment of "most items for each category of checks (such as local and nonlocal)" before funds must be made available for withdrawal to depositors.

The Check 21 survey indicated that depositary banks can expect to receive only 6 percent of all returned local checks by the opening of businesses on the business day that funds must be made available. For nonlocal checks, depositary banks can expect to receive only 57 percent of returned checks by the opening of business on the business day that funds must be made available. If the maximum permissible nonlocal hold period were reduced by one business day, depositary banks could expect to receive only 30 percent of nonlocal returned checks by the opening of business on the business day that funds must be made available. These percentages are well below the long-standing benchmark of two-thirds of all returned checks recommended by the Congress for lowering such thresholds.

While the use of Check 21 authority has recently begun to grow more rapidly within the interbank check-collection market, the use of substitute checks and electronic check images to collect and return checks still constitutes a minority (about 20 percent) of all paid checks and only a somewhat larger share (about 26 percent) of all interbank check collections. As a result, increased adoption of Check 21 authority has likely only somewhat improved check return times. The consolidation of Federal Reserve check-processing regions, by contrast, is reducing rapidly the effective maximum permissible hold periods being applied to an increasing proportion of checks that has previously been considered nonlocal. Therefore, the Board has concluded that reductions of the maximum permissible hold periods for local and nonlocal checks are not warranted at this time.

Deposits at nonproprietary ATMs

The Board also assessed whether there was sufficient justification to reduce the five-day maximum permissible hold period on deposits at nonproprietary ATMs under the standard set forth in the EFAA.[44] For the Board to reduce the blanket hold period on deposits at nonproprietary ATMs, the bank of the customer making the deposit (depositor's bank) should be able to learn of the nonpayment of most of the deposited checks before funds must be made available under the shortened schedule.

43. As discussed earlier in this report, a paying bank's business processes affect when it can make the decision to pay or not pay checks before the midnight deadline. This may also affect the total time needed to collect and return those checks. This deadline is generally midnight of the banking day following the banking day of receipt of the check by the paying bank (UCC section 4-302 and Regulation J section 210.12(a)), except as the deadline may be extended under section 229.30(c) of Regulation CC.

44. 12 USC 4002(e).

To help evaluate the current hold period, the Board asked representatives of the banking industry, ATM networks, and ATM manufacturers about deposit-taking practices at nonproprietary ATMs. According to those representatives, many ATM networks offer shared-deposit arrangements for their bank members and a large percentage of those members (particularly credit unions) participate in the arrangements.[45] Only a small percentage of transactions involving nonproprietary ATMs (approximately 1 percent of all such "shared transactions" at one large ATM network), however, are associated with deposits to transaction accounts.

The Board then considered the timeframe in which banks could expect to receive returned checks that were deposited at nonproprietary ATMs. While the Board did not request banks to provide information about the amount of time it takes to receive returned checks that were deposited at nonproprietary ATMs as part of its March 2006 survey, the survey's overall results remain instructive. In particular, a bank would expect to receive, at most, an average of 54 percent of all checks deposited at a nonproprietary ATM by the opening of business the fourth business day following the banking day of deposit (or one business day earlier than the bank is currently required to make those funds available). This does not meet the congressional standard recommended for reducing the maximum permissible hold period. Further, the total time required to return a check deposited at a nonproprietary ATM to the depositor's bank likely is longer, on average, than indicated by the Board's survey. This is because the depositor's bank typically learns of the nonpayment of a check only after the ATM operator or its bank receives the returned check or otherwise learns of its nonpayment.

The Congress adopted the five-day maximum hold on nonproprietary ATM deposits in the EFAA in recognition that, while the depositor's bank was informed of the total amount of the deposit, it did not know its composition (that is, whether the deposit consisted of cash, local checks, nonlocal checks, etc.). Therefore, the depositor's bank could not place holds based on the type of deposit made in a nonproprietary ATM. The Board considered whether changes have occurred in the technology used in ATM networks or in network policies and procedures since the passage of the EFAA that now enable the depositor's bank to learn of the composition of their customers' deposits at nonproprietary ATMs. Based on this review, the Board has determined that the information provided to the depositor's bank regarding customer deposits at nonproprietary ATMs has not changed materially since the Congress adopted the EFAA. While image-enabled ATMs have the potential to provide significantly greater information, only 1 percent of ATMs currently have this functionality and ATM networks generally do not forward the needed information to the depositor's bank.[46] Therefore, the Board has concluded that reductions of the maximum permissible hold periods for deposits at nonproprietary ATMs are not warranted at this time.

45. Among the ATM networks offering shared deposit arrangements are the three largest regional networks (STAR, NYCE, and CO-OP), MasterCard's Cirrus and Visa's Plus global networks, and smaller networks, such as Shazam and Credit Union 24.

46. "Banks May Use Multiple Vendors for Imaging ATMs," *ATM & Debit News*, vol. 7, no. 7, December 14, 2006, pp. 1 and 5. There were an estimated 395,000 proprietary and nonproprietary ATMs in use across the United States in March 2006. According to industry estimates, the cost for upgrading certain ATMs to image check and cash deposits is $10,000 to 15,000 per ATM. A new image-capable ATM costs approximately $40,000.

Other section 603 time periods

The Board also considered whether to recommend that the Congress reduce the applicable hold periods for deposits of electronic payments, cash, and next-day checks; for checks deposited outside the contiguous United States; and for deposits of nonlocal on-us checks—as well as other time requirements set forth in section 603 of the EFAA that the Board may not modify by rule.[47]

Electronic payments subject to the next-day availability requirement are ACH credit transfers and wire transfers. For these payments, the banking day of deposit is defined as the day that finally settled funds are received and the depositary bank has the information needed to credit the customer's account.[48] In the case of ACH credit transfers, which are typically recurring direct deposits of pay or benefits, the customer's bank often receives the payment instructions before the settlement date. Under NACHA rules, if payment instructions for these types of payments are received by the customer's bank by 5:00 p.m. (local time) on the banking day prior to the settlement date, the bank must make the funds available for withdrawal at the opening of business on the settlement date. If the bank receives the payment instructions at a later time, NACHA rules require that the funds be available for cash withdrawal on the settlement date.[49] Similarly, UCC article 4A, governing wire transfers, generally requires the beneficiary's bank to pay the beneficiary on the payment date.[50] The Board's commentary on Regulation CC provides that the regulation's next-day availability requirement for electronic payments does not preempt or invalidate other rules or agreements that require prompter availability of funds.[51] Therefore, the Board does not believe that there is a need for a legislative change to the current next-day availability requirement for deposits by electronic payment.

The EFAA also requires next-day availability for cash deposits and certain check deposits that were considered to be low risk (such as deposits of U.S. Treasury checks and deposits of certain state and local government, cashier's, certified, and teller's checks). While some banks are able to post these deposits immediately to a customer's transaction account at the teller window, other banks do so as part of their end-of-day processing activities. To reduce fraud risks associated with some next-day items, some banks may have procedures to inspect these checks more closely before making the funds available for withdrawal. For these reasons, and because banks are currently providing same-day availability on about half of all deposits of next-day checks, the Board does not recommend legislative changes to these requirements.

Deposits of cash and next-day checks that do not meet the statutory and regulatory requirements for next-day availability typically involve other operational challenges, such as the collection of deposits at off-premise proprietary ATMs or drop-boxes, that may further increase the amount of time it takes to complete their processing or collection. Therefore, the Board does not recommend any modifications to these hold periods.

47. 12 USC 4002(a), (b)(3), and (d)(2).

48. 12 CFR 229.10(b).

49. Article Four, section 4.4.1 of NACHA rules. Additionally, the U.S. Treasury has incorporated these rules by reference within its own regulations governing government ACH payments. 31 CFR 210. These rules apply to Prearranged Payment and Deposit Entry (PPD) credit transactions, which according to NACHA reports represented nearly three quarters of all ACH credit transactions in fourth quarter 2006.

50. UCC 4A-404(a).

51. 12 CFR part 229, appendix E, paragraph IV.C.4.

The EFAA extends the maximum permissible hold period by one business day on deposits of checks to consumer transaction accounts located in Alaska, Hawaii, Puerto Rico, or the Virgin Islands where the paying bank is located within the contiguous United States.[52] The Board's Check 21 survey did not receive sufficient responses from banks located outside the contiguous United States to determine whether this requirement should be modified.[53] The banks that did respond indicate that they typically wait longer to receive most nonlocal returned checks and to provide availability on deposits of most nonlocal checks compared with survey respondents more generally. Perhaps because of more extensive local clearinghouse arrangements, the respondents also indicated that they received most local checks one business day earlier; their actual funds-availability practices, however, were similar to those of other banks.

The Reserve Banks' experience with deposits of checks from banks located outside the contiguous United States generally are consistent with these anecdotal results. In particular, it may take up to an additional business day for the Reserve Banks to collect or return nonlocal checks deposited with them by banks located outside the contiguous United States compared with similar nonlocal checks deposited within the contiguous United States. Therefore, the Board does not recommend any modification of this hold period.

On-us checks that are deposited and paid in different states or Federal Reserve check processing regions are considered nonlocal checks for funds-availability purposes within the EFAA.[54] The Board's Check 21 survey did not specifically ask banks about nonlocal on-us checks. Discussions with banking representatives indicate, however, that many of the large commercial banks that have gone through a number of bank mergers or acquisitions have yet to integrate their check-processing operations and systems located across the country. This dispersion of check-processing operations and lack of common software systems poses a hindrance to these banks' abilities to process and return checks that are collected between their different branches or other organizational operations. That said, banks indicated they generally provided prompter funds availability than required by the EFAA on deposits of all on-us checks. In addition, as the Reserve Banks continue to merge their check-processing operations, an increasing proportion of nonlocal on-us checks will become local on-us checks subject to next-day funds availability. Therefore, the Board does not recommend any modification of this hold period.

Amount limits

In addition to the maximum permissible hold periods, the Board evaluated whether to recommend legislative changes to the value limits established in sections 603 and 604 of the EFAA. Section 603 of the EFAA requires that banks give next-day availability for up to the first $100 deposited on any one business day by a check or checks that are not otherwise entitled to next-day availability.[55] The law also allows a bank to extend by one business day the time that

52. 12 USC 4002(d)(2).

53. Eight banks located in Alaska and Hawaii provided data to the Board regarding their actual funds-availability practices and returned-check times. The respondents included commercial banks, credit unions, and savings institutions.

54. 12 USC 4002(b)(2).

55. 12 USC 4002(a)(2)(D).

funds deposited by local checks, nonlocal checks, or checks deposited at a nonproprietary ATM are available for withdrawal by cash or other similar means; however, a bank that uses this extension must make $400 of those funds (in addition to the first $100 that receive next-day availability as described above) available for cash withdrawal by no later than 5 p.m. local time of the business day on which the funds are available based upon the maximum permissible hold periods.[56]

In addition, section 604 of the EFAA requires that the first $5,000 of the aggregate amount of certain types of checks that normally receive next-day availability that are deposited in a new account on any one banking day be given next-day (or, if not deposited in person, two-day) availability. The remaining amount of a deposit to a new account that exceeds $5,000 must be made available by the opening of business not more than eight business days following the business day of deposit (nine-day availability).[57] The statute also authorizes the Board to establish by regulation, and the Board has so established in section 229.13 of Regulation CC, "reasonable exceptions" to the maximum permissible hold periods for the amount of one or more checks deposited to an existing account on the same banking day that exceeds $5,000 (the large-dollar exception).[58]

Since the EFAA was enacted, inflation has reduced substantially the real value of the cash-withdrawal limits of $100 and $400 and the large-dollar amount limit of $5,000.[59] Increasing these limits may materially benefit consumers, particularly those with lower incomes who maintain low account balances and need quicker availability for deposited checks. At the same time, the increased amount limits may expose banks to an additional risk of loss if checks are returned unpaid and the associated funds cannot be recovered from the depositor. If the Congress were to raise these limits, it might also raise questions as to whether other amount limits (such as those established within the Truth in Lending Act and Electronic Fund Transfer Act) should be increased.

Section 604 safeguard exceptions

Finally, the Board evaluated whether to recommend legislative changes to the safeguard exceptions set forth in section 604 of the EFAA. Congress established the safeguard exceptions to permit banks to better manage accounts or deposits that pose additional risk, such as new accounts, accounts that have been overdrawn repeatedly, large-dollar deposits, or checks that have been returned unpaid and redeposited. Most types of check deposits in new accounts generally are excepted from the maximum permissible hold periods. The statute also authorizes the Board to establish by regulation, and the Board has so established in section 229.13 of Regulation CC, "reasonable exceptions" to the maximum permissible hold periods for checks that have been returned unpaid and redeposited (the redeposited-check exception) and deposit accounts that have been overdrawn repeatedly (the repeated-overdraft exception).[60]

56. 12 USC 4002(b)(3).

57. 12 USC 4003(a)(3).

58. 12 USC 4003(b)(1).

59. Adjusted for inflation, the $100 and $400 amount limits would increase to $150 and $600, respectively. The $5,000 amount limit would increase to $7,500.

60. 12 USC 4003(b)(2)–(3).

The law also requires the Board to establish regulations that permit banks to extend the maximum permissible hold periods for deposited checks "if the receiving depository institution has reasonable cause to believe that the check is uncollectible" or if there are emergency conditions such as war or the suspension of payments by another depository institution.[61] The Board also may, on a temporary basis, suspend any application of any part of the EFAA if the Board determines that "depository institutions are experiencing an unacceptable level of losses due to check-related fraud and suspension (of any part of the EFAA) with regard to the classification of checks involved in such fraud is necessary to diminish the volume of such fraud."[62] The Board must report to Congress within 10 days of prescribing such a temporary suspension.

The EFAA requires banks to notify customers within a certain period when they invoke safeguard exceptions and limits their application of those extended holds to a "reasonable period of time as determined by the Board."[63] The Board has determined by regulation that it is "reasonable" for a depositary bank to extend the availability date as follows when invoking safeguard exceptions: one additional business day beyond the maximum permissible hold period for local on-us checks (for a two-day total hold), five additional business days for local checks (for a seven-day total hold), and six additional business days for nonlocal checks and deposits at nonproprietary ATMs (for an eleven-day total hold).[64] The Board permits banks to place longer holds on these deposits, but only if the bank can establish that such an extension is reasonable.[65]

These exceptions enhance a bank's ability to minimize losses from check deposits that are typically more prone to fraud or returns. Based upon the results of the Board's Check 21 survey, discussions with the banking industry, communications with consumer representatives, and review of other relevant data, the Board does not recommend any modification of the safeguard exceptions.

61. 12 USC 4003(c)–(d).

62. 12 USC 4003(e).

63. 12 USC 4003(f).

64. 12 CFR 229.13. Checks that normally would receive next-day availability are treated as if they were local or nonlocal checks, as appropriate, for purposes of determining a reasonable hold period under this section.

65. 12 CFR 229.13(h)(4).

Board of Governors of the Federal Reserve System

Appendix A –The Federal Reserve's Check 21 Survey

This appendix provides supplementary information and analysis to the overall report. It includes additional information about the methodology used in the Board's March 2006 survey along with additional survey data.

Sampling and Survey Methodology

The survey questionnaire was sent to a stratified random sample of 2,621 commercial banks, savings institutions, and credit unions, hereafter collectively referred to as "banks." The bank population included all federally insured commercial banks, savings institutions, and credit unions that had transaction account balances greater than zero on December 31, 2005. Population estimates were based on year-end transaction account balances as reported in the "Consolidated Report of Condition and Income" filed by all federally insured banks as of December 31, 2005. Table A.1 shows that the banks were classified according to their total assets as small, medium, and large (less than $0.5 billion, between $0.5 and $5 billion, and $5 billion and greater, respectively).

Table A.1
Number of Banks in Population and in Sample, by Type and Size of Bank

	Population, by size of bank				
Type of bank	Small	Medium	Large	Total	Total in sample
Commercial banks	6,458	752	129	7,339	1,787
Credit unions	5,924	261	7	6,192	535
Savings institutions	918	259	47	1,224	299
Total banks	13,300	1,272	183	14,755	…
Total in sample	1,707	749	165	…	2,621

Source: 2006 Check 21 survey.
Note: Covers period March 1–31, 2006.

The sample size requirements for the survey, as well as the sample design, were based on recent Federal Reserve experience with another check survey.[1] Using measures of bank-to-bank variability derived from that survey, as well as the survey response rates, this sample was designed to yield estimates of the total number of checks paid by banks in the United States and other associated statistics with a desired precision of (+/–) 5 percent at a 95 percent level of confidence.

1. See Gerdes, Geoffrey R., Jack K. Walton II, May X. Liu, and Darrel W. Parke (2005), "Trends in the Use of Payment Instruments in the United States," *Federal Reserve Bulletin*, vol. 91 (Spring), pp. 180–201. The month of March was selected for the survey period because it is roughly representative of an average month in the Federal Reserve check-processing data and because it is one of two months used in previous check surveys.

Table A.2
Number of Survey Responses by Type and Size of Bank

Type of bank	Size of bank			Total responses
	Small	Medium	Large	
Commercial banks	409	180	78	667
Credit unions	98	78	5	181
Savings institutions	46	51	21	118
Total responses	553	309	104	966

Source: 2006 Check 21 survey.
Note: Covers period March 1–31, 2006.

In total, 966 banks responded to the Board's survey, a response rate of 37 percent. Approximately 80 percent of the top 100 banks in the country responded to the survey. Although the response rates were higher for large banks, respondents were well distributed by type and size, so that meaningful estimates for these subclasses could be constructed.

The survey responses exhibited a complex pattern of missing items ("item nonresponse"), requiring a process to determine whether responses were accurate and complete enough to be used in estimation. To determine the usability of each response, reported data were first edited for errors in logical consistency and for highly unusual or improbable reported amounts.[2] In such cases, follow-up calls were conducted to validate the quality of the responses. In many cases, follow-up calls resulted in corrections to faulty data. In some cases, data initially deemed highly unusual were confirmed and accepted as originally reported. In other cases, the highly unusual or illogical data could not be confirmed by the respondent. If such data could not be validated through contact with the respondents, the faulty items were deleted and coded as missing.

To be deemed usable, survey responses were not required to include all requested items. Instead, a process called imputation was used to fill in a bank's missing items using the items that were reported by the bank and the estimated relationships among the same items for the data provided by other respondents. The method used for imputation of the missing items depended on the type of item and whether the item was missing because of item nonresponse or an edit based on a logical error.

In the case of missing items due to logical errors, where possible, items deleted during the editing process were imputed using the inherent logical constraints and information about the relevant relationships exhibited by banks with similar reported data in which logical errors were absent.

For the estimates of funds availability, a complete response was required to include no missing items in all three categories of check deposits in order to be deemed usable. Similarly, for estimates of return times, a usable response was required to include no missing items for any of the three categories of check deposits. Therefore, additional imputations beyond those for logical consistency were not used for funds-availability and return-time estimates. The resulting imputed estimates did not differ materially from estimates derived using all the reported items.

2. Logical errors in the reported data included impossible relationships for classifications of items, such as a set of subcategories that did not sum to the associated totals, and impossible relationships between number-value pairs, such as a zero number associated with a non-zero value.

Analysis of the combined 36 categories of check losses and check volumes reported in number-value pairs required no missing items among included responses. The requirement of a complete set of actual reported data for all items, however, would have resulted in the loss of a significant amount of information. Therefore, a formal approach for imputing missing items for all usable responses was required. There were 279 unique patterns of missing data within this group. Because many of these patterns exhibited a significant absence of information, not all patterns were usable. Specifically, patterns that did not include at least the total number or value of check losses and at least one of the four items from total checks paid and total checks collected were excluded from imputation and estimation. This approach was taken because the data from responses excluding this minimal information were not usable for the formation of the desired expected values. The missing items of the remaining 712 responses were imputed using the method described below.

A maximum-likelihood estimate of the means and covariance matrix of the number-value pairs was produced using the EM algorithm, following an approach outlined in Little and Rubin (2002).[3] Using linear regressions derived from the maximum-likelihood estimates of the means and covariances, expected values were produced for the missing items of each respondent based upon the items that were reported. Specifically, missing items in subcategories were imputed using their estimated relationship with institution type, size, any reported and related totals, and any reported and directly related number (for value) and value (for number). Imputations were formed by imposing logical constraints on the conditional expectations.

Stratified ratio estimates were constructed from the resulting, maximum-likelihood-based, logically constrained imputed dataset. Estimated variances of the ratio estimates were calculated using a multiple-imputation method, which introduced random error into the imputed data from the linear regression models, accounting for the variability of the reported data as well as the variability inherent in the imputations, with logical constraints on the relationships between the items imposed. The variance estimates were computed using five imputed datasets following a method outlined in Levy and Lemeshow (1999).[4]

Distribution of Checks by Presentment Method and by Type of Check

The Check 21 survey requested that banks report the total number and value of checks paid by the paying bank and whether presentment was made using a paper check or electronic data.[5] Checks used as source documents to initiate ACH payments were excluded from the report, as they are not check payments. The survey data indicated that the method through which checks were presented varied only marginally by type and size of institution. Table A.3 indicates that during March 2006, 93 percent of all checks paid in the United States entailed the presentment of a paper check to the paying bank. The paper check used for presentment to the paying bank was either the original check or a substitute check created from the electronic image

3. See Little, Roderick J.A. and Donald B. Rubin (2002), *Statistical Analysis with Missing Data*, 2nd ed. (Hoboken, NJ: John Wiley), section 11.2.1 pp. 223–226.

4 See Levy, Paul S. and Stanley Lemeshow (1999), *Sampling of Populations: Methods and Applications*, 3rd ed. (Hoboken, NJ: John Wiley), section 13.6, pp. 412–416.

5. Banks provided information on the total dollar value and number of checks presented to them for payment. Follow-up telephone discussions with survey participants, however, suggested that there was continued confusion between check conversion (using ACH) and electronic check presentment. Moreover, some banks were unable to provide detailed volume information. In particular, banks that rely on service providers to process their checks were unable to determine whether checks were presented to them in paper or electronic form.

of the original check.[6]

As shown in tables A.3 and A.4, the survey data indicate that the use of Check 21 authority to create and present substitute checks was independent of the type and size of the paying bank to which the checks were presented. The remaining 7 percent of checks were presented electronically with the agreement of the paying bank.

Table A.3
Distribution of Checks, by Presentment Method and Asset Size

Percent

Presentment Method	Size of paying bank						All banks	
	Small		Medium		Large			
	Value	Number	Value	Number	Value	Number	Value	Number
Paper presentment	*95*	*90*	*96*	*94*	*92*	*94*	*93*	*93*
Original checks	85	87	89	91	85	91	85	90
Substitute checks	10	3	7	3	7	3	8	3
Electronic presentment	*5*	*10*	*4*	*6*	*8*	*6*	*7*	*7*
Image presentment	3	3	3	2	2	2	2	2
MICR presentment	3	7	2	3	6	4	5	5
Total	100	100	100	100	100	100	100	100

Source: 2006 Check 21 survey.
Note: Covers period March 1–31, 2006. Figures may not sum to totals because of rounding.

Electronic presentments can take the form of image presentment or MICR line presentment. Under image presentment, presentment occurs when an image of the check and the MICR line data are sent to the paying bank, whereas under MICR line presentment, only the MICR line data are sent to the paying bank. In both cases, the paper check may be delivered to the paying bank; for the purposes of this study, respondents to the Board's survey were requested to provide information for image presentments and MICR presentments where the delivery of the paper check is *not* a condition of presentment.[7]

As shown in table A.4, the survey data indicate that credit unions are more likely to receive MICR presentment than commercial banks and savings institutions. Electronic check presentment comprises 18 percent of total checks presented for credit unions, 7 percent for commercial banks, and 3 percent for savings institutions.[8] Credit unions are more likely to agree to MICR presentment because they typically provide check-safekeeping services to their customers and do not return checks with account statements.

6. Although many banks were able to provide accurate information on total checks presented as the paying bank, few were able to confidently categorize the paper checks into subcategories of original and substitute checks. Although forwarded substitute checks are identified by a *4* in position 44 of the check's MICR line per ANSI X9 standards, the indicator is not essential to the processing of substitute checks. Accordingly, estimates of the total number of paper checks presented are likely to be more reliable than the individual estimates of original checks and substitute checks presented.

7. Electronic presentment agreements can take many forms and may include the delivery of paper checks or check images to the paying bank.

8. Although many banks were able to provide accurate information on total checks presented to them as the paying bank, few were able to confidently categorize electronic presentments into the subcategories of image presentment and MICR presentment. Accordingly, estimates of the total number of electronic presentments are likely to be more reliable than the individual estimates of image presentments and MICR presentments.

Table A.4
Distribution of Checks, by Presentment Method and Type of Paying Bank

Percent

Presentment method	Type of paying bank						All banks	
	Commercial banks		Credit unions		Savings institutions			
	Value	Number	Value	Number	Value	Number	Value	Number
Paper presentments	*93*	*94*	*84*	*82*	*97*	*97*	*93*	*93*
Original checks	85	91	81	80	89	95	85	90
Substitute checks	8	3	3	2	8	2	8	3
Electronic presentment	*7*	*6*	*16*	*18*	*3*	*3*	*7*	*7*
Image presentment	2	3	3	1	2	1	2	2
MICR presentment	5	4	13	17	1	2	5	5
Total Checks	100	100	100	100	100	100	100	100

Source: 2006 Check 21 survey.
Note: Covers period March 1–31, 2006. Figures may not sum to totals because of rounding.

The survey also requested that survey participants report, by type of check, the dollar amount and number of all checks deposited at their banks for March 2006. Tables A.5 and A.6 highlight the distribution of each type of checks across different types of depositary banks.

Table A.5
Distribution of Checks, by Type of Check and Size of Depositary Bank

Percentage

Type of check	Type of depositary bank						All banks	
	Small		Medium		Large			
	Value	Number	Value	Number	Value	Number	Value	Number
Next-day	49	48	40	37	29	27	33	32
Local	30	32	33	38	29	35	30	35
Nonlocal	22	20	28	25	41	38	37	33
Total	100	100	100	100	100	100	100	100

Source: 2006 Check 21 survey.
Note: Covers period March 1–31, 2006. Figures may not sum to totals because of rounding.

Table A.6
Distribution of Checks, by Type of Check and Type of Depositary Bank

Percent

Type of check	Type of depositary bank						All banks	
	Commercial banks		Credit unions		Savings institutions			
	Value	Number	Value	Number	Value	Number	Value	Number
Next day	32	31	48	49	39	40	33	32
Local	30	35	31	33	30	37	30	35
Nonlocal	38	34	22	18	30	23	37	33
Total	100	100	100	100	100	100	100	100

Source: 2006 Check 21 survey.
Note: Covers period March 1–31, 2006. Figures may not sum to totals because of rounding.

Funds-availability Practices

The Check 21 survey indicated that about 90 percent of consumer deposits of local and nonlocal checks to transaction accounts receive better funds availability than required under the EFAA. About half of all consumer deposits of next-day checks received same-day availability; that is, funds were made available on the banking day of deposit.

Funds-availability practices vary somewhat by bank type and size. Table A.7 shows that commercial banks provide faster funds availability than required under the EFAA on 92 percent of all local and 95 percent of all nonlocal consumer check deposits. Credit unions provide faster availability than required on 84 percent of local and 79 percent of nonlocal deposits. Savings institutions provide faster availability on 72 percent of local and 78 percent of nonlocal deposits.

Table A.7
Consumer Customer Funds Availability, by Type of Check and Bank

Percent

Type of check availability	Type of bank						All banks	
	Commercial banks		Credit unions		Savings institutions			
	Incremental	Cumulative	Incremental	Cumulative	Incremental	Cumulative	Incremental	Cumulative
Next-day checks								
Same day	45	45	81	81	54	54	49	49
Next day	55	100	19	100	46	100	51	100
Local checks								
Same day	24	24	71	71	29	29	29	29
Next day	68	92	12	84	43	72	61	89
Two days	8	100	16	100	28	100	11	100
Nonlocal checks								
Same day	13	13	61	61	26	26	18	18
Next day	56	69	5	65	15	42	47	66
Two days	20	88	7	72	24	65	19	85
Three days	6	94	5	77	8	73	6	91
Four days	1	95	3	79	5	78	2	92
Five days	5	100	21	100	22	100	8	100

Source: 2006 Check 21 survey.
Note: Covers period March 1–31, 2006. Figures may not sum to totals because of rounding. Except for funds made available the banking day of deposit, these figures reflect funds availability provided at the opening of business of that business day.

As shown in table A.8 small banks provide faster funds availability than required on 88 percent of local and 90 percent of nonlocal consumer check deposits. Medium-sized banks provide similar funds availability on 84 percent of local and 87 percent of nonlocal deposits. Large banks provide faster availability on 92 percent of local and 96 percent of nonlocal deposits.

Table A.8
Consumer Customer Funds Availability, by Check Category and Asset Size

Percent

Type of check availability	Size of bank						All banks	
	Small		Medium		Large			
	Incremental	Cumulative	Incremental	Cumulative	Incremental	Cumulative	Incremental	Cumulative
Next-day checks								
Same day	47	47	44	44	52	52	49	49
Next day	53	100	56	100	48	100	51	100
Local checks								
Same day	42	42	33	33	20	20	29	29
Next day	46	88	51	84	72	92	61	89
Two days	12	100	16	100	8	100	11	100
Nonlocal checks								
Same day	33	33	27	27	7	7	18	18
Next day	40	73	40	67	54	61	47	66
Two days	9	82	12	79	27	88	19	85
Three days	5	87	6	85	6	95	6	91
Four days	2	90	2	87	1	96	2	92
Five days	10	100	13	100	4	100	8	100

Source: 2006 Check 21 survey.
Note: Covers period March 1–31, 2006. Figures may not sum to totals because of rounding. Except for funds made available the banking day of deposit, these figures reflect funds availability provided at the opening of business of that business day.

Returned Checks

Checks that are not honored by the paying bank are returned to the depositary bank so that they can be charged back to the depositor. The length of time needed to process, dishonor, and return checks is important because the depositary bank faces some risk of loss if funds from a deposited check are withdrawn from the depositor's account before the depositary bank learns that the check was returned unpaid and it is unable to recover the loss from the depositor.

The Board's 1996 study indicated that the average time taken for depositary banks to receive returned checks had improved from 6.8 calendar days (4.9 business days) before the implementation of the EFAA to 5.5 calendar days (3.9 business days) in 1995. This demonstrated a decline in average return times of about 1.3 calendar days, or about 20 percent. Based upon the Board's 2006 Check 21 survey, the time to return an unpaid check averaged 5.1 calendar days (3.7 business days) in March 2006—shorter, though not significantly, than the estimate in the Board's 1996 study.

The 2006 Check 21 survey asked respondents to specify the number of business days it

takes for a returned check to make the roundtrip from being deposited to their bank to being returned to their bank unpaid. The 2006 survey asked this question for each of the three types of checks: next-day, local, and nonlocal.

Next-Day Checks. As shown in table A.9, depositary banks reported that about 16 percent of next-day returned checks were delivered to the depositary bank after one business day after the banking day of deposit during March 2006.

Table A.9
Return Times for Next-Day Checks, by Size of Bank

Cumulative percent

Number of business days	Size of bank			All banks
	Small	Medium	Large	
1	14	11	18	16
2	32	29	48	40
3	57	59	71	65
4	75	78	81	79
5	87	88	93	91
6	92	92	96	94
7	96	95	97	97
8 or more	100	100	100	100

Source: 2006 Check 21 survey.
Note: Covers period March 1–31, 2006. Figures may not sum to totals because of rounding. Figures include all checks returned to the depositary bank by the close of business of each business day.

Table A.10 shows that, on average, commercial banks received about 18 percent of next-day returned checks within one business day; credit unions, 4 percent; and savings institutions, 5 percent.

Table A.10
Return Times for Next-Day Checks, by Type of Bank

Cumulative percent

Number of business days	Type of bank			All banks
	Commercial banks	Credit unions	Savings institutions	
1	18	4	5	16
2	44	18	22	40
3	68	46	58	65
4	80	59	82	79
5	92	75	92	91
6	95	81	95	94
7	97	89	96	97
8 or more	100	100	100	100

Source: 2006 Check 21 survey.
Note: Covers period March 1–31, 2006. Figures may not sum to totals because of rounding. Figures include all checks returned to the depositary bank by the close of business of each business day.

Local Checks. As shown in table A.11 and A.12, depositary banks reported that about 22 percent of local returned checks were delivered to the depositary bank by the close of business two business days after the banking day of deposit in March 2006.

Table A.11
Return Times for Local Checks, by Size of Bank

Cumulative percent

Number of business days	Size of bank			All banks
	Small	Medium	Large	
1	7	5	7	6
2	24	21	21	22
3	56	62	72	66
4	75	80	87	82
5	88	91	93	91
6	93	95	97	96
7	97	97	98	98
8 or more	100	100	100	100

Source: 2006 Check 21 survey.
Note: Covers period March 1–31, 2006. Figures may not sum to totals because of rounding. Figures include all checks returned to the depositary bank by the close of business of each business day.

Table A.12
Return Times for Local Checks, by Type of Bank

Cumulative percent

Number of business days	Type of bank			All banks
	Commercial banks	Credit unions	Savings institutions	
1	7	4	0	6
2	24	14	13	22
3	70	35	56	66
4	86	51	78	82
5	93	76	89	91
6	97	84	97	96
7	99	91	98	98
8 or more	100	100	100	100

Source: 2006 Check 21 survey.
Note: Covers period March 1–31, 2006. Figures may not sum to totals because of rounding. Figures include all checks returned to the depositary bank by the close of business of each business day.

Nonlocal Checks. In tables A.13 and A.14, banks reported that about 57 percent of nonlocal returned checks were delivered to the depositary banks by the close of business four business days after the banking day of deposit. Further, only 30 percent of nonlocal checks were returned by the close of business of the third business day.

Table A.13
Return Times for Nonlocal Checks, by Size of Bank

Cumulative percent

Number of business days	Size of bank			All banks
	Small	Medium	Large	
1	2	1	1	2
2	7	6	11	9
3	23	21	38	30
4	46	46	66	57
5	70	73	84	78
6	83	84	92	88
7	92	93	96	94
8 or more	100	100	100	100

Source: 2006 Check 21 survey.
Note: Covers period March 1–31, 2006. Figures may not sum to totals because of rounding. Figures include all checks returned to the depositary bank by the close of business of each business day.

Table A.14
Return Times for Nonlocal Checks, by Type of Bank

Cumulative percent

Number of business days	Type of bank			All banks
	Commercial banks	Credit unions	Savings institutions	
1	2	1	0	2
2	10	4	7	9
3	33	12	21	30
4	62	25	41	57
5	82	42	72	78
6	91	59	90	88
7	96	79	96	94
8 or more	100	100	100	100

Source: 2006 Check 21 survey.
Note: Covers period March 1–31, 2006. Figures may not sum to totals because of rounding. Figures include all checks returned to the depositary bank by the close of business of each business day.

Check Losses

The estimated value of all check losses at banks in 2005 was $1 billion. This was an increase of about 13 percent compared with the value of all check losses at banks in 2004.

Approximately 87 percent of all banks incurred check losses during 2005. Ninety-nine percent of all large banks incurred check losses. These banks accounted for about 67 percent of all banks' total losses. Large banks had an average loss per bank of approximately $3.7 million. Ninety-eight percent of medium banks incurred check losses, with an average loss per bank of $113.6 thousand, representing about 14 percent of all banks' total losses. A smaller percentage of small banks, 80 percent, experienced check losses. Small banks incurred the lowest average loss per bank, estimated at $14 thousand per bank.

As indicated in table A.15, the value of commercial banks' check losses amounted to about $718 million. Savings institutions and credit unions reported substantially lower aggregate losses.

Table A.15
Check Losses and Recoveries, by Size and Type of Bank
2005

	Losses				Recoveries	
Size or type of bank	Percent with check losses	Millions of dollars	Thousands of cases	Average loss per case in millions	Millions of dollars	Thousands of cases
Size Group						
Small	80	187	332	563	64	162
Medium	98	144	206	702	48	76
Large	99	686	595	1,154	195	528
Type of Bank						
Commercial banks	84	718	791	909	246	650
Credit unions	96	104	194	535	26	70
Savings institution	93	196	148	1,321	34	46
Total	87	1,018	1,133	898	307	766

Source: 2006 Check 21 survey.
Note: Data is for all of 2005. Figures may not sum to totals because of rounding.

The estimated number of cases of check loss was about 1.1 million. Credit unions incurred the lowest average loss per case; however, commercial banks had a significantly higher number of cases. The average loss per case was about $535 for credit unions, compared with about $909 per case for commercial banks, and $1,321 per case for savings institutions.

Banks were asked to report the dollar amount of check-loss recoveries during calendar year 2005. These recoveries may also have been associated with check losses incurred during previous years. Based on the responses, the value of recoveries for all banks in 2005 was $307 million and these recoveries were associated with 766 thousand cases.

Board of Governors of the Federal Reserve System

Appendix B –Check 21 Survey Instrument

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM
CHECK SURVEY

This report is authorized by law [12 U.S.C. §5015]. Your voluntary cooperation in submitting this report is needed to make the results comprehensive, accurate, and timely. The Federal Reserve may not conduct or sponsor, and an organization is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The Federal Reserve System regards the individual bank information provided by each respondent as confidential.

Public reporting burden for this collection of information is estimated to average 10 hours per response, including the time to gather and maintain data in the required form, to review the instructions and to complete the information collection. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: Secretary, Board of Governors of the Federal Reserve System, 20th and C Streets, N.W., Washington, D.C. 20551; and to the Office of Management and Budget, Paperwork Reduction Project (7100-0279), Washington, D.C. 20503.

You are encouraged to complete the survey by visiting www.federalreserve.gov/[to be provided]/. Please use the user ID and password provided in the cover letter to access the survey.

Alternatively, you may complete this form and fax it to the Board of Governors of the Federal Reserve System at (866) 359-6619. Please include the name and phone number of a person that we can contact should there be questions about your responses.

All responses are requested by May 1, 2006. Thank you for your time and cooperation.

Survey

I. Bank information		
Name:		
City:	State:	Zip code:
Contact name:	Phone number: ( )	
Email:		

The Board expects that you are answering this survey based solely on information for your chartered institution. In order to ensure accurate representation, we need to verify which institutions are covered by your response. Please check here if you know that your answers to the survey questions encompass other chartered institutions, such as affiliates or subsidiaries. ☐

In such cases, please indicate below which other institutions are included in your response.

Charter 2 _____

Charter 3 _____

Charter 4 _____

Charter 5 _____

II. Check losses

Reporting estimated data

If possible, provide a precise response (the actual measured amount) to each of the following questions. If you are unable to give a precise response—for example, if your institution does not routinely maintain statistics in the same categories or in the same detail requested on the survey form—we encourage you to provide an estimate. Please check the estimate box (Est.□) if your response is an estimate.

Please leave no item blank. There are two possible ways to answer a survey question.

Enter a value if you can provide the actual value or an estimate of the data element for your institution (enter 0 if the value is zero). Please round all percentages to the nearest whole percent.

Enter DK (don't know) if you cannot provide the actual value or an estimate but your institution has non-zero volume of the type requested. Please do not enter NA.

2.1 Specify the dollar amount of your check losses and the number of cases associated with those losses that were incurred during calendar year 2005 both as the **bank of first deposit** and as the **paying bank**. Include the amount of the loss but no other costs associated with the loss. Include losses before any recoveries associated with the cases identified with those losses. Do not include losses associated with checks converted to ACH payments (for example, ARC payments).

	Dollar amount of loss($)	Number of cases
Total check losses (sum of (i) and (ii) below)	$ _____ Est.□	_____ Est.□
(i) As bank of first deposit	$ _____ Est.□	_____ Est.□
(A) Next-day availability checks	_____ Est.□	_____ Est.□
(B) Local checks	_____ Est.□	_____ Est.□
(C) Nonlocal checks	_____ Est.□	_____ Est.□
(ii) As paying bank	$ _____ Est.□	_____ Est.□

2.2 Specify your check loss recoveries during calendar year 2005. (Recoveries are losses originally written off by your bank but subsequently recouped. Recoveries may correspond to check losses incurred in 2005 or earlier years.)

	Dollar amount of recoveries	Number of cases
Total recoveries	$ _____ Est.□	_____ Est.□

2.3 Did your bank experience a greater, a smaller, or about the same dollar amount of check losses in 2005 compared with 2004? Please provide the percentage change.

Note: calculate losses before recoveries associated with the cases identified.

- ☐ Greater losses than the previous year
- ☐ Smaller losses than the previous year
- ☐ Same losses as the previous year
- ☐ Don't Know

Percentage change in dollar amount of check losses +☐ -☐ _____(%) Est.☐

III. Volume

Reporting estimated data

If possible, provide a precise response (the actual measured amount) to each of the following questions. If you are unable to give a precise response—for example, if your institution does not routinely maintain statistics in the same categories or in the same detail requested on the survey form—we encourage you to provide an estimate. Please check the estimate box (Est.□) if your response is an estimate.

Please leave no item blank. There are two possible ways to answer a survey question.

Enter a value if you can provide the actual value or an estimate of the data element for your institution (enter 0 if the value is zero). Please round all percentages to the nearest whole percent.

Enter DK (don't know) if you cannot provide the actual value or an estimate but your institution has non-zero volume of the type requested. Please do not enter NA.

3.1 Provide the dollar amount and number of all checks presented to your bank as **paying bank** for the time period March 1, 2006, through March 31, 2006. Include inclearings and on-us checks. Include checks that your bank subsequently returned unpaid. Count each check only once (e.g. do not provide the number of item passes). Do not include checks for which your bank is not the paying bank (that is, checks that your bank is collecting for your respondent banks as an intermediary bank) or noncheck items, such as deposit slips, general ledger tickets, etc. Do not include checks converted to ACH payments (for example, ARC payments).

	Dollar amount ($)	Number of checks
Total checks presented to your bank as paying bank	$ _____ Est.□	_____ Est.□
(i) Total paper checks presented	$ _____ Est.□	_____ Est.□
(A) Original checks	_____ Est.□	_____ Est.□
(B) Substitute checks	_____ Est.□	_____ Est.□
(ii) Total checks presented electronically	$ _____ Est.□	_____ Est.□
(A) Image presentment	$ _____ Est.□	_____ Est.□
(B) MICR line presentment	$ _____ Est.□	_____ Est.□

(Include items presented electronically for payment. Do not include items where delivery of paper checks is a condition of presentment. Report these items as paper presentments. Do not include checks converted to ACH payments, for example, ARC payments.)

3.2 Provide the dollar amount and number of all checks deposited at your bank as the **bank of first deposit** for the time period March 1, 2006, through March 31, 2006. Do not include checks converted to ACH payments, for example, ARC payments.

	Dollar amount ($)	Number of checks
Total checks deposited at your bank as bank of first deposit	$ _____ Est.☐	_____ Est. ☐
(*Do not include checks converted to ACH payments, for example, ARC payments.)*		
(i) Next-day availability checks deposited	_____ Est.☐	_____ Est.☐
(ii) Local checks deposited	_____ Est.☐	_____ Est.☐
(iii) Nonlocal checks deposited	_____ Est.☐	_____ Est.☐

IV. Funds availability (Please note that this section will request information on your actual funds-availability practices with respect to **consumer** accounts.)

Reporting estimated data

If possible, provide a precise response (the actual measured amount) to each of the following questions. If you are unable to give a precise response—for example, if your institution does not routinely maintain statistics in the same categories or in the same detail requested on the survey form—we encourage you to provide an estimate. Please check the estimate box (Est.□) if your response is an estimate.

Please leave no item blank. There are two possible ways to answer a survey question.

Enter a value if you can provide the actual value or an estimate of the data element for your institution (enter 0 if the value is zero). Please round all percentages to the nearest whole percent.

Enter DK (don't know) if you cannot provide the actual value or an estimate but your institution has non-zero volume of the type requested. Please do not enter NA.

4.1 For the time period March 1, 2006, through March 31, 2006, indicate your **actual funds-availability practices** for check deposits to **consumer** accounts that do not qualify for exception holds under Regulation CC. Assume that the original deposit of the check at your bank occurs at Day 0.

	Percentage of the number of checks deposited in consumer accounts
(a) Next-day availability checks	
(i) Same business day (Day 0)	_____% Est.□
(ii) Next business day (Day 1)	_____% Est.□
	100 %
(b) Local checks	
(i) Same business day (Day 0)	_____% Est.□
(ii) Next business day (Day 1)	_____% Est.□
(iii) Two business days (Day 2)	_____% Est.□
	100 %
(c) Nonlocal checks	
(i) Same business day (Day 0)	_____% Est.□
(ii) Next business day (Day 1)	_____% Est.□
(iii) Two business days (Day 2)	_____% Est.□
(iv) Three business days (Day 3)	_____% Est.□
(v) Four business days (Day 4)	_____% Est.□
(vi) Five business days (Day 5)	_____% Est.□
	100 %

V. Return items

Reporting estimated data

If possible, provide a precise response (the actual measured amount) to each of the following questions. If you are unable to give a precise response—for example, if your institution does not routinely maintain statistics in the same categories or in the same detail requested on the survey form—we encourage you to provide an estimate. Please check the estimate box (Est.□) if your response is an estimate.

Please leave no item blank. There are two possible ways to answer a survey question.

Enter a value if you can provide the actual value or an estimate of the data element for your institution (enter 0 if the value is zero). Please round all percentages to the nearest whole percent.

Enter DK (don't know) if you cannot provide the actual value or an estimate but your institution has non-zero volume of the type requested. Please do not enter NA.

5.1 For the time period March 1, 2006, through March 31, 2006, specify the number of business days it takes for a returned check to make the round trip from being deposited in your institution to being returned to your institution unpaid. Please provide the distribution of the number of days it takes returned checks to make the round trip for each of the three types of returned checks (local, nonlocal, next-day availability). Assume that the original deposit of the check at your bank is Day 0.

Please indicate if percentages are estimates. Est.□

	Percent of returned checks
Next-Day Availability	
(a) One business day	_____ %
(b) Two business days	_____ %
(c) Three business days	_____ %
(d) Four business days	_____ %
(e) Five business days	_____ %
(f) Six business days	_____ %
(g) Seven business days	_____ %
(h) Eight or more business days	_____ %
	100 %

	Percent of returned checks
Local	
(a) One business day	_____ %
(b) Two business days	_____ %
(c) Three business days	_____ %
(d) Four business days	_____ %
(e) Five business days	_____ %
(f) Six business days	_____ %
(g) Seven business days	_____ %
(h) Eight or more business days	_____ %
	100 %

	Percent of returned checks
Nonlocal	
(a) One business day	_____ %
(b) Two business days	_____ %
(c) Three business days	_____ %
(d) Four business days	_____ %
(e) Five business days	_____ %
(f) Six business days	_____ %
(g) Seven business days	_____ %
(h) Eight or more business days	_____ %
	100 %

Purpose

The Check Clearing for the 21st Century Act requires the Board of Governors of the Federal Reserve System to study the implementation of the law and its effect on various aspects of check processing, including funds-availability, and to report the results of the study to Congress by April 28, 2007. Specifically, Congress directed the Federal Reserve to study and report to Congress on the following:

(1) The percentage of total checks cleared in which the paper check is not returned to the paying bank
(2) The extent to which banks make funds available to consumers for local and nonlocal checks prior to the expiration of maximum hold periods
(3) The length of time within which depositary banks learn of the nonpayment of local and nonlocal checks
(4) The increase or decrease in check-related losses over the study period
(5) The appropriateness of the time periods and amount limits applicable under sections 603 and 604 of the Expedited Funds Availability Act, as in effect on the date of enactment of the Check 21 Act.

To assist in its evaluation of these issues, the Board is conducting this survey to gather data from a nationally representative sample of depository institutions. The sample will include commercial banks, savings institutions, and credit unions. The survey is voluntary.

Instructions

As a survey participant, your responses may be used to represent other institutions like yours that were not selected for the study. To achieve the most reliable results, it is important that you respond completely and accurately. If your institution outsources payments processing to another organization, please request the necessary data from that organization.

The information collected from the survey will be released on an aggregated basis only. Individual responses will be kept confidential.

Survey period

For questions exploring check losses (section II), the survey asks for data covering calendar year 2005. For all other questions (sections III, IV, and V), the survey requests data for the month of March 2006.

Responding to survey questions

Please report only for your chartered depository institution and not for any affiliated institutions.

Please leave no item blank. There are two possible ways to answer a survey question.

Enter a value if your institution has the actual value or an estimate of the data element (enter 0 if the value is zero). Please round all percentages to the nearest whole percent.

Enter DK (don't know) if your institution has volume of the type being measured, but you are unable to report at least an estimate for your organization. Please do not enter NA.

Reporting estimated data

Your institution may not routinely maintain data statistics in the same categories or in the same detail requested on the survey form. If you are unable to give a precise response, we encourage you to provide an estimate. Please check the estimate box (Est.□) if your response is an estimate.

Questions about the survey

If you have any questions about how to complete this survey, please call (866) 351-6802.

Completed survey

Institutions are encouraged to complete the survey by visiting www.federalreserve.gov/[now obsolete]/. Please use the user ID and password provided in the cover letter to access the survey.

Alternatively, institutions may complete the attached paper version of the survey and fax it to (866) 351-6802. Please include the name and phone number of a person whom we can contact should there be questions about your responses.

All responses are requested by May 1, 2006.

Glossary

Several of the terms used in the survey are defined in Regulation CC. For those terms, the definitions provided below are summaries and you should refer to Regulation CC for a more complete definition.

ARC payments (accounts receivable entries) means consumer checks received at a lockbox or drop-off location that are converted to automated clearinghouse (ACH) payments for processing.

Bank means depository institution, including commercial bank, savings institution, or credit union.

Bank of first deposit means the depositary bank; the first bank at which a check is deposited.

Cases means the number of incidents in which the bank incurred check losses. A case may involve one or more checks.

Check means a negotiable instrument drawn on a bank. For this study, please follow these guidelines:

Checks include	Checks do not include
• Checks written by individuals, businesses, or government entities	• Deposit slips
• Share drafts	• General ledger tickets
• Money orders	• Other non-check documents, such as payment coupons
• Official checks (for example, cashier's checks, teller's checks)	• Checks handled as an intermediary bank (correspondent check volume)
• Traveler's checks	• ARC payments
• Payable through drafts	

Check losses means financial losses incurred by a bank related to processing check payments in which the bank was unable to recover losses from its customer. Losses reported for this survey should only include the value of the check and should only include losses incurred by the bank. Losses should be reported before recoveries associated with the checks identified. Internal check fraud (by employees) is not to be included unless it was part of an organized effort that involved parties outside the bank.

Consumer account means a transaction account used primarily for personal, family, or household purposes.

Electronic check presentment (ECP) means the presentment of checks electronically to the paying bank when the delivery of paper checks to the paying bank is not necessary for legal presentment.

Exception holds means the safeguard provisions that allow a bank to extend the time to make funds available beyond two business days for local checks and five business days for nonlocal checks under Regulation CC. The safeguard exceptions are for new accounts, accounts with repeated overdrafts, aggregate deposits exceeding $5000, reasonable cause to doubt collectibility, and emergency conditions.

Image presentment means electronic check presentment when an image of the check and the MICR line are included in the data sent to the paying bank. Under image presentment, the delivery of paper checks to the paying bank is not necessary for legal presentment.

Local check means a check payable by a local paying bank. A local paying bank is a paying bank located in the same Federal Reserve check processing region as the bank of first deposit.

MICR line presentment means electronic check presentment when only the MICR line of the check is

included in the data sent to the paying bank. Under MICR line presentment, the delivery of paper checks to the paying bank is not necessary for legal presentment.

Next-day availability check means a check deposited in an account that must be made available for withdrawal no later than the business day after the banking day on which the funds were deposited. Types of checks with next-day availability include, under certain conditions, on-us checks, Treasury checks, U.S. Postal Service money orders, Federal Reserve Bank or Federal Home Loan Bank checks, state or local government checks, and cashier's, certified, or teller's checks.

Nonlocal check means a check payable by a nonlocal paying bank. A nonlocal paying bank is a paying bank not located in the same Federal Reserve check-processing region as the bank of first deposit.

On-us check means a check payable by the same bank that is also the bank of first deposit. Some banks call these "on-us by-us" checks.

Paying bank means the bank by, through, or at which a check is payable and to which it is sent for payment or collection.

Recoveries means check losses that were written off by the bank but subsequently recouped. Write offs do not include checks that are immediately charged back to a customer's account that has funds to cover the loss.

Returned check means a check that a paying bank returns unpaid to the bank of first deposit.

Regulation CC means the Federal Reserve Board regulation implementing the Expedited Funds Availability Act and Check Clearing for the 21st Century Act. The regulation specifies funds-availability schedules with which banks must comply and procedures for returning checks. It also contains rules related to substitute checks.

Substitute check means a paper reproduction of an original check containing an image of the front and back of the original check and printed in accordance with ANSI X9.100-140. A substitute check is legally the same as the original check provided it meets Regulation CC's requirements for legal equivalence.

Transaction account means an account, such as demand deposit, NOW account, share draft account, or other checkable deposit account, that can be used to make fund transfers or withdrawals using paper or electronic payment instruments, such as a check or debit card. A transaction account does not include a savings account, which is limited to six transfers or withdrawals per month, as defined in the Federal Reserve Board's Regulation D.